# CULTURAL

# INTELLIGENCE

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## *Individual Interactions Across Cultures*

P. CHRISTOPHER EARLEY

SOON ANG

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To all of those people I have been fortunate to meet during my various sojourns and who tolerated my personal CQ limitations.

—P.C. EARLEY

*S.D.G.*—who maketh us the same yet different.

—S. ANG

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# PREFACE

We live in an exciting world. With advances in air travel and other forms of transport technologies, traveling and sojourning around the world has become more affordable and accessible. As we sojourn around the globe, we encounter people who strike us as being like ourselves, and yet, at the same time, thinking and behaving differently. Some of these differences intrigue us; and at other times, they catch us by surprise.

—UNATTRIBUTED SOURCE, BBC NEWS, JANUARY 12, 2000

After the tragic events of September 11, 2001, in New York, Washington, and the fields of Pennsylvania, cultural understanding has become highly salient. Innumerable media sources repeatedly pose the question: Why should terrorists kill thousands of innocent Americans? Contrast this with a widespread concern within the Islamic community that Western forces are using this unfortunate incident to interfere with their right to pursue their own religious doctrine. As one Islamic colleague commented after these events, "I do not agree at all with this type of radical response to Western intervention and I fully condemn it. However, the West needs to understand that this is a situation brought on by an unfortunate interaction of Western powers with Islamic communities. This complex and tragic situation reflects a multitude of difficulties in international relations and politics; it reflects as well fundamental failure of people to understand one another's culture and needs."

All too often, and unfortunately, cultural differences lead to difficulties and conflict. One of the ways that researchers have tried to explore such interpersonal misunderstandings is through the elaboration and extension of the construct of intelligence. A number of faceted models of intelligence have been proposed by researchers, including John Berry, Howard Gardner, John Mayer and Peter Salovey, Robert Sternberg, among others. Approaches such as identifying social intelligence, emotional intelligence, physical intelligence, artistic intelligence, practical intelligence, and successful intelligence, just to name a few, have proliferated in the last decade. These approaches have provided many new and important insights for understanding interpersonal interactions. However, what remains unclear is how these culture-bound models might inform the intercultural or international scholar. That is, the cues and behaviors easily understood by someone having high social intelligence within her culture might be entirely misleading or irrelevant in another culture. For example, emotional restraint may be interpreted accurately as disinterest in an American context during an inspirational speech, whereas such restraint may reflect an entirely different experience for a low-affective-display culture. The challenge for an international sojourner is that in highly novel cultures, most of the cues and behaviors that are familiar may be lacking, so entirely new interpretations and behaviors are required. A person who is able to generate such new and appropriate responses has a high *cultural intelligence*, or CQ, in our usage.

Unfortunately, a framework or monograph providing us with a roadmap for understanding cultural intelligence and the quagmire facing international sojourners does not exist. Our work provides the first such framework that can be used to understand why people vary so dramatically in their capacity to adjust to new cultures. Our theoretical model consists of multiple facets that explain how cultural intelligence functions. Perhaps more importantly, we provide a basis for an intervention that may be used to improve someone's intercultural interactions. We extend and consolidate the evolving literature on intelligence and cross-cultural understanding by developing a comprehensive model that incorporates a dynamic, multilevel view. Our model focuses on various features of intercultural adjustment by looking at three features of a person's cultural intelligence: cognition, motivation, and behavior. The cognitive aspect addresses the question, "Do I know what is happening?" The motivational aspect addresses the question, "Am I motivated to act?" The behavioral aspect addresses the question, "Can I respond appropriately and effectively?"

Our book is intended for scholars and graduate students interested in the topic of intelligence and in intercultural interactions from various fields including cognitive and cross-cultural psychology, anthropology, sociology, and management. We draw from these various disciplines to describe cultural intelligence; our framework provides scholars in these areas with a new way of addressing issues such as metacognition and cognition, cultural adjustment, role and social identity, global management, and intercultural communication. To this end, we provide an integrative review of the intelligence literature along with research from anthropology and sociology. Further, several of the chapters in Part I of our book focus on application of our core concept to several critical aspects of functioning in a global environment. To this end, we solicited input from several scholars who applied the concept of cultural intelligence to international work assignments and training.

Chapter 1 introduces our basic assumptions and definitions and provides an overview of the remaining chapters. Chapter 2 is a comprehensive review of the literature related to intelligence, including a wide array of studies across an extensive time period. Chapter 3 provides an overview of the specific model driving our thinking along with an extensive description of the component parts. Chapters 4–6 detail various aspects of the general model presented in Chapter 3. In Chapter 4 we discuss the cognitive aspect of cultural intelligence focusing on metacognition and cognition. Chapter 5 focuses on the motivational aspect of CQ, looking at various self motives including self-enhancement, efficacy, and consistency. Chapter 6 examines the behavioral facet of CQ and discusses the way that behavior is acquired in intercultural encounters. The next four chapters (7–10) constitute Part II in which we use the CQ construct to better understand intercultural encounters in organizations as well as the training and measurement of CQ. Chapter 7 discusses the importance of CQ from a measurement view, including some preliminary suggestions concerning how CQ might be assessed. In Chapter 8 we discuss the implications of CQ for expatriate work assignments. Chapter 9 provides an application of CQ to intranational diversity contexts including workplace diversity in teams. Chapter 10 looks at various ways that CQ might be enhanced through training interventions and finishes with the development of a new framework for training using CQ. In Chapter 11 we conclude with a discussion of implications for research and practice, including a research agenda for the topic of multinational teams in organizations.

What began as a casual observation that some managers who are adept within their own culture fail to understand and function in new cultures led us to the development of an overarching theory of intercultural interaction based on the concept of intelligence. However, our search not only led us to develop a new perspective on understanding intercultural interactions, it also guided us in the formulation and assertion of a more integrative conceptualization of intelligence itself. By combining traditional cognitive views of intelligence with the fields of motivational and behavioral analysis, we provide a new direction for researchers in this domain. The somewhat artificial barriers derived from research on intelligence are no longer in keeping with a global perspective. Our hope is that we provide an important step forward in breaking down these barriers by providing a different approach to understanding intelligence.

*

Many individuals contributed to the creation of this book. Needless to say, our theory that we advance is the accumulation of our research and experiences that have been shaped by a number of key individuals. We have been exposed to many stimulating ideas by Albert Bandura, Michael Bond, Miriam Erez, Howard Gardner, Robert Goffee, Edward Hall, Elaine Mosakowski, Nigel Nicholson, Robert Sternberg, and Harry Triandis, to name just a few. We are grateful to our home institutions and colleagues for their continued support as we worked on our book. Further, we would like to thank a number of people for their helpful suggestions: Albert Bandura; Michael Bond; George Dreher; Cristina Gibson; Elaine Mosakowski; Harry Triandis; the CQ research group at the Center for Strategic Leadership and Cultural Intelligence at the Nanyang Business School, Roy Chua, Ho-Ying Fu, Chay Hoon Lee, Kok Ye Ng, Star Soh, Joo-Seng Tan, Cheryl Tay-Lee, and Klaus Templar; and the faculties at University of Chicago and University of Southern California.

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P. Christopher Earley
Soon Ang

# CULTURAL
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# 1

# INTRODUCTION

When people work across cultures and countries, a global perspective in management theory becomes critical. Given the global nature of work people increasingly work in international teams and divisions (Earley and Gibson 2002). However, management literature is populated with numerous tales of ineffective expatriate managers who fail to grasp important nuances of their host culture (Black and Gregersen 1991; Black, Gregersen, Mendenhall, and Stroh 1999). The result of such inability to adapt and understand local culture is significant and costly to organizations.

Many frameworks used to study human interaction in various settings have been developed in North America and Western Europe during the last three decades. One such stream of research has emphasized a fundamental aspect of human cognition, or intelligence (Sternberg 1985, 1997). The tradition of research on intelligence can be traced back one hundred years, with early contributions by theorists such as Binet, Guilford, Spearman, Terman, Thurstone, and Thorndike. The twentieth century reflects an even greater emphasis on the definition, assessment, and measurement of human intelligence, evidenced by such endeavors as the development of the standardized intelligence test (Stanford-Binet) and rise of the Educational Testing Service and its impact on modern education.

The significance of intellectual assessment, with its relative social implications, is the subject of public debate as reflected by the publication of recent works such as *The Bell Curve* (Herrnstein and Murray 1994). How might people be classified? Are assessment instruments culturally fair and unbiased? Is the predictive validity of these instruments sufficient to warrant reliance on them? Is intelligence a unidimensional construct reflecting a general factor ("g"), or is it multidimensional or componential? The topic of intelligence and its assessment remains most compelling but incomplete.

Amid the various popularized versions of such work come a number of important advances in work on the topic of intelligence, representing a significant break from traditional views of the construct (H. Gardner 1983; Mayer and Salovey 1997; Sternberg 1977, 1985, 1997, 2000a). For example, drawing from an intellectual tradition rooted in Thorndike (for example, Thorndike and Stein 1937) and Thurstone (1938), Howard Gardner proposed and popularized the idea that there are multiple facets to one's intelligence (see, for example, Gardner's books including *Frames of Mind* [1983] as well as *Multiple Intelligences* [1993]). Gardner developed a theory of multiple intelligences, including bodily kinesthetic, linguistic, musical, and personal intelligences. He argued that his intelligences exist on the basis of their cultural significance and their relation to underlying brain structures and functioning. A number of other scholars' works reflect this departure from the dominant view of intelligence as consisting of an underlying construct, "g." (We review these conceptual models in Chapter 2 as a foundation for our subsequent discussion.) Robert Sternberg's Triarchic Model (1977, 1988) provides one such framework that has a great deal of significance for our research. Sternberg's idea of tripartite organization of human intelligence is highly significant and has given rise to a number of additional models and variations.

More recent advances have generated renewed interest in the notion that there exists a social intelligence separate from the cognitive skills often thought to underlie general intelligence. For example, Mayer and Salovey (1997) describe one of the concepts related to social or personal intelligence: emotional intelligence. This concept has become extremely popular, and we believe it has been misunderstood in its discussion and presentation. Emotional intelligence has expanded excessively and now seems to incorporate many, many related concepts, thus it has lost some of its discriminative capacity. Nevertheless, one of the key contributions of recent work on multiple intelligences frameworks is that of identifying *social intelligence*—a concept that dates to the time of Thorndike (1920), who referred to social intelligence as the ability to understand others and to act or behave wisely in relating to them. In a related vein, some scholars define social intelligence as the ability to get along with people, knowledge of social matters, ease with others, empathy for others, and insights concerning others.

The concept of social intelligence reflects a general category of capability concerning social interaction. People having a high social or emotional intelligence are thought to be relatively more able to empathize, work with, direct, and interact with other people. In essence, high social intelligence reflects a person's capacity to perform actions (such as problem solving) with and through others. From the organizational viewpoint we take throughout this study, social and emotional intelligence seems clearly related to such popular and important concepts as leadership and motivation. Leadership centers largely on an individual's ability to discern key moods and emotions (as well as to evoke relevant reactions) in followers (House, Wright, and Aditya 1997). Thus, social intelligence is an important factor in understanding a leader's capacity to shape and respond to the needs and reactions of followers.

Sashkin's (1988) adaptation of Parsonian theory, for example, argued that charismatic leadership can be thought of as a fundamental aspect of value reorientation. The charismatic leader is one whose work is "defining, constructing, and gaining commitment to a set of shared values, beliefs, and norms about change, goals, and people working together—that is, defining, building, and involving people in the organization's culture" (Sashkin 1988, 136). From this view, a charismatic leader functionability depends on the extent to which a shared culture exists between the leader and the followers. An effective leader is one who can identify emotions and underlying values that are shared with followers, rather than assume a more proactive role.

The argument that a charismatic leader instills a vision within his or her followers by identifying key emotions and values of a follower is particularly important from a cultural perspective. The shared vision, the argument suggests, provides followers guidance for their actions. However, how does one guarantee that such a shared vision comes to pass? Kets de Vries (1988) uses a psychoanalytic approach in which he identifies underlying cultural themes that emerge as collective symbols. He argues that for leaders to be effective there must be a congruence between their own and societal concerns. The essence of the charismatic leader is a projection of personal struggles into a shared, or universal, concern that societal members (followers) try to solve collectively. For example, in an individualistic society, a leader must struggle against the situation as an autonomous agent; in a collectivistic society, the social relation of leader to follower (and social protocols) dominates the leader's attention. A collectivistic leader struggles to maintain her in-group's social structure as they confront external challenges.

One of the most effective ways for charismatic leaders to transfer these struggles to their followers is through myths and symbols. Kets de Vries argued that leaders are ideal recipients for the "crystallization of primitive and unstable identifications" (1988, 243) as a result of transference. In other words, a charismatic leader becomes a group ego and conscience to handle the followers' anxieties as well as the embodiment of the followers' favored past relationships. A paternalistic leader assumes the role of father figure in a society endorsing a strong and controlling relationship among parents and children. From a cultural viewpoint, it becomes clear that the charismatic trait reflects different characteristics, or themes, across cultures. Thus, Gandhi's struggles capture relevant aspects of Indian culture, but not necessarily ones that would provoke sentiment in American culture. Thus, a charismatic leader of one organization does not necessarily capture the hearts and minds of followers from a different type of organization. From a social intelligence viewpoint, an important element is how does a leader identify these key symbols of a new culture with which he or she is unfamiliar? How can an American expatriate manager use the inspiration of "remember the Alamo" in an Indonesian factory having employees unfamiliar with the state of Texas let alone the Alamo and American history? Further, once this expatriate manager realizes the futility of inspiring with American slogans and historical references, how does he or she go about identifying inspirational symbols identified by the Indonesian employees? In Part Two of this study we take up these questions when we describe applications of our model to work practices.

Despite the abundance of interest and published work in the past three decades on intelligence, a large gap remains in the examination of the nature of intelligence from a cultural viewpoint. We introduce a construct of intelligence that reflects adaptation to varying cultural contexts, or what we call *cultural intelligence* (CQ). (We use the shorthand label of CQ as a convenience to remind the reader that this is a facet of intelligence. However, we do not use CQ in a strict fashion as is implied by "IQ"; that is, we do not mean to denote a mathematical relationship generated from normative data of capability. In this sense, our usage parallels that from the literature on emotional intelligence and their usage of "EQ.") Our approach differs from what may be inferred from a casual look at the idea of intelligence across cultures. This book is significant because of what we posit as a new framework for understanding intercultural exchange and what we do not assert concerning the nature of intelligence across cultures. We neither endorse (nor refute) the cultural relativity argument of Berry (1974), nor do we adhere to the universal arguments dominating much of the recent work on "g" (such as Jensen 1982a) and brain potentials. Our focus is to provide a new understanding for the age-old problem of the sojourner: Why is it that some people adjust relatively easily, quickly, and thoroughly to new cultures but others cannot seem able to do so. There are anecdotal cases (many of them) of individuals who show great empathy within their own culture—seemingly high on "emotional intelligence" and other forms of social intelligence—yet they fail to adjust to new cultures easily. In contrast, some managers appear lacking in social skills yet adjust effectively to new cultures.

In the latter case it might easily be asserted that the problem was merely one of "matching" a person's interpersonal style to a particular culture. Let us assume the difficulty faced by a person who is Apollonian (reticent) in style (Glenn and Glenn 1981) but living in a Dionysian (effusive) culture. If this individual moves to a more Apollonian culture (for example, German culture) than we would predict a better fit of person to culture and, hence, a better-adjusted individual. However, this is not the argument that we make with the notion of CQ. Rather, we argue that this person may have the capability to adjust to the new cultural circumstance because of the three facets of CQ that form the core of our discussion.

In the case of the highly empathetic person (from the perspective of her own culture), why should not a high social intelligence and EQ translate to a cultural chameleon able to move among cultures with great ease? Take, as an example, the American manager who ran a maquiladora just on the Mexico side of Arizona. This manager was reported by his American employees to be highly understanding and sympathetic with a good insight into people's interests and needs. In an attempt to "get to know his key employees better" he invited his two top managers (Mexican) to his home in Arizona for a weekend visit with his wife and family. He viewed this gesture as a chance to let these managers know that he viewed them as more than employees alone. After refusing the invitation numerous times, the two managers finally (after a period of several months) acquiesced and visited his home. The next week he returned to the factory only to find that both managers had resigned. How could such a thing happen? Had he offended them during the visit? Were they insulted by the relative opulence of his household? Had the lowered power distance reflected in the visit offended them? These were the various possibilities that he mulled over in his mind as he attempted to contact them and ask them to return to the company. After a number of calls one of the two managers agreed to return to his job. When the American asked this manager what he had done (or left undone) to offend his guests, the Mexican manager replied that he had not done anything at all to them. They had, in fact, enjoyed the visit. However, it problematicized for them maintaining control of their employees on the factory floor. The American asked why, since he had assumed that "mingling" with the "boss" would raise their social capital and enhance their prestige and face. The Mexican manager said that the opposite was true. By lowering the power distance between himself and his Mexican managers, the American sent a signal to all of the employees that there was no significant power differential within the company. As a result, the power base of the Mexican managers (who relied on cultural values of strong power and authority) was undermined. Under this circumstance, they felt that they had no recourse except for leaving the company. The American manager had great empathy and social intelligence *within* his own culture, but he was unable to discern and interpret the cues provided by individuals from another culture. It is for this type of anecdotal evidence that we put forth our model of cultural intelligence.

## WHAT OUR APPROACH IS NOT

This book does not represent several things, and we want to avoid any confusion with regard to them. First, our book is not about the relative intelligence of different cultures. We are not taking an approach akin to that used in Hernstein and Murray's *Bell Curve* work, nor do we take on the controversy of cultural bases of intelligence from a demographic approach. Throughout the book we treat CQ as individual's difference and characteristics, much like the traditional work has treated cognitive intelligence. Each individual can be thought of as having his or her unique CQ, and this capability is based on unique experiences. CQ as a group-level construct does not really make sense in the way that we approach the construct, just as an individual-level definition of intelligence or personality does not apply to groups or teams without significant redefinition and adaptation.

Thus, reference to CQ as if some cultural groups, societies, or nations are "more culturally intelligent" than others is wholly inaccurate. Despite personal experiences that many of us have had in dealing with one culture or another—and the resulting temptation to label some cultures are "smarter" and more able to adapt to newcomers than others—we are not describing intelligence as an attribute of a group of people. The reader interested in such an approach to the study of various peoples might pursue some existing cultural frameworks and ideas such as cultural syndromes including "tight versus loose" or "masculine versus feminine" cultures (Glenn and Glenn 1981; Hofstede 1991).

Second, our book is not about the reconceptualization of intelligence as a relative concept varying from one culture to another (Berry 1974). Although we by no means disagree that such a conceptualization is useful, and in our opinion, correct, our intention is not to argue for a cultural relativism of intelligence. The idea that intelligence varies as a function of one's cultural, social, and ecological background is the core element of John Berry's work and an extension of Witkin's notion of psychological differentiation (Witkin and Berry 1975). Berry (1974) argued that conceptions of intelligence vary substantially across cultures. Berry proposed a four-level model of context that specified the nature of context. At the highest level is ecological context, reflecting the natural habitat of a person. Next is the experiential level, or the pattern of recurrent experiences that provide the basis for learning. The third level is the performance context, comprising the limited set of environmental influences that account for particular behaviors at specific points in space and time. Finally, at the most proximate level is the experimental context, or the setting in which research and testing of ideas and ways of engaging the world occur.

Various studies support Berry's assertions that intelligence is best thought of as having specific (emic) as well as universal (etic) aspects to it (Gannon and Assoc. 2001; H. Gardner 1983; Sternberg et al. 1999; Triandis 1972, 1975). The imperialism reflected in past work (and present as well) by Western researchers seems inappropriate and rather impractical from an applied field such as management.

That said, our approach posits a universal construct of intelligence that is critical for individuals who are attempting intercultural interactions and living. We focus our attention on the explication and definition of a component of intelligence that is key for adjusting to, and interacting with, cultures other than one's own.

Third, our construct of cultural intelligence is not simply a minor adaptation of social intelligence or emotional intelligence. Let us begin by contrasting our construct with that of emotional intelligence. According to Mayer and Salovey, emotional intelligence refers to a complex set of characteristics: "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (1997, 5).

Emotional intelligence captures a variety of attributes related to a person's ability to read and respond to the affective states of others. Further, it reflects a person's ability to regulate and direct his own affective states. For example, a leader who is transformational (Bennis and Nanus 1985) is able to detect and guide the mood of his or her followers in order to motivate them and inspire them to pursue the leader's vision. An effective leader inspires through the careful regulation of emotion. Take, for example, Kennedy's speech about American patriotism ("Ask not what your country can do for you but what you can do for your country"). We can think about the setting, nature of presentation, actions of leader and subordinate as working according to these organized ideas. No one attending the president's speech needed to be told to remain quiet during its presentation, nor did the president need to be told to use dramatic pauses to heighten emotional responses in the listeners. The content of his speech drew on the American ideal of the importance of each person making a difference, and his use of dramatic pauses and emotion are ideal for inspiring Americans.

However, this presentation style and content may not be useful in other, more group-focused cultures (Earley and Erez 1997). That is, the symbolism relating to individual initiative and differentiation may be alienating in cultures for which personal identity is tied to group context. We are making two basic points: first, the actions of leaders and employees are not spontaneous; and second, expectations that guide the actions used by leaders and employees reflect (to a degree) emotional intelligence, and, more importantly, these expectations that we hold about leaders and work have cultural as well as personal roots.

The latter point is an important way that cultural intelligence differs from emotional intelligence. Emotional intelligence presumes a degree of familiarity with culture and context that may not exist. Although the researchers dealing with emotional intelligence do not specifically limit their models to being culture-bound, they do not provide any adequate discussion of cross-cultural context and how the concept might be expanded to include it.

Cultural intelligence differs from social intelligence as well for the same reasons we specify for emotional intelligence. The formulations of social intelligence are relatively void of cultural richness. This is ironic since one of the earliest critics of reformulations of intelligence theory called for the explicit consideration of cultural context (Berry 1974) and the concept itself is very old in the literature (Cronbach 1960). According to Salovey and Mayer (1990), social intelligence reflects the ability to understand and manage people. Renewed interest concerning social intelligence arose during the 1980s and 1990s, and this work is nicely represented by Sternberg and Smith's (1985) as well as Sternberg and colleague's work (1981) on the topic. In one study, Sternberg and Smith asked subjects to view photographs of couples and to judge whether they were strangers posing together or actually involved in a dating or marital relationship. Sternberg and colleagues (1981) asked lay people to describe what they perceived to be an "intelligent person." They found that a number of the attributes were "socially related," such as accepting others as they are and displaying interest in the world around them. In a related vein, Cantor and Kihlstrom (1985) have argued that social intelligence may be an underlying dimension of personality. According to their view, social problem solving (an inherent part of social intelligence) is a central personality process that underlies social behavior. They place the locus of personal characteristics in social and personal schemata that we store in memory and retrieve in various social situations.

So what are we left with in such a comparison? Social intelligence might be thought of as a superordinate characteristic under which we might classify cultural intelligence, much in the same way that emotional intelligence is presumed to subside (Salovey and Mayer 1990). However, there are a number of problems with this classification (Miller 1997). First, social intelligence sans culture presumes universality of content and processes. That is, if we do not explicitly differentiate psychological processes across cultures, we fail to capture the impact of environment (Miller 1997). This is not to say that all psychological processes underlying intelligence are culture-bound—this is not our point. However, we argue in this book that the etic aspects of cultural intelligence reflect metalevel, or general, cognitive capacities that are readily transferable across contexts. In our framework, there are key aspects of higher-order processing, such as category formation of social relationships (for example, marriage), that are universal but their specific manifestation may differ. (We develop these arguments further in Chapter 3.) In our view, universal aspects of cognitive processing, such as the existence of declarative from procedural knowledge, exist, but the content of these categories are culture- and individual-differences bound.

Second, if we assume that cultural intelligence is subsumed within social intelligence, then it follows that we must reject a cultural relativism of content and process of discovery. Logically, then, the ways that we discover social knowledge and practices must be invariant across cultures. This is a position that we strongly refute; indeed, there seems to be ample evidence from cross-cultural psychology to abandon such a position (for example, Miller 1997, 1984; Smith, Peterson, and Misumi 1994; Triandis 1994). Given the progress that has been made on understanding how ecological and social forces influence thought processes, experience of emotion, and behavior responses it seems clear that assuming a universalist stance on social intelligence is unwarranted. As such, we see cultural intelligence as a separate form of intelligence distinct but not superordinate to social intelligence. In this specific case, cultural intelligence captures the capability of a person to adjust to various cultures and cultural settings and not just within a single one. Thus, we define cultural intelligence as:

> A person's capability for successful adaptation to new cultural settings, that is, for unfamiliar settings attributable to cultural context.

Cultural intelligence consists of three aspects, including cognitive, motivational, and behavioral elements. The cognitive aspect refers to general cognitive skills that are used to create new specific conceptualizations of how to function and operate within a new culture as well as culture-specific knowledge (both declarative and procedural). The general, or metalevel, skills reflect etic categories of definition (for example, long-term pairing of mating partners or so-called marriage institution) as well as metalevel procedural aspects (for example, styles of cognizing and discovery). Certain communication competencies, such as coherence, reasoning, and error detection, are categories of communication. These categories are universal, or etic, at a general level. At a culture-specific level, how each is defined may vary. Is intuition proper "reasoning"? Is fully explicating one's ideas "coherent" or excessive? (In a high-context culture, one can imagine the coherence of a low-context communicator as intolerably excessive at times.) A somewhat different question concerns the ways that people come to acquire declarative knowledge of their environment. Thus, the other facet of cognition is the procedures that one uses to attain declarative knowledge about another culture. At a metalevel, this procedural knowledge is etic in its nature, although people vary in their capability of executing these procedures. That is, at a general level people share across cultures "ways to learn to learn" about a new culture. These are assumed to be hard-wired in the sense that they are the fundamental processes through which all individuals gather and store information about the world around them. The psychological mechanisms of memory storage, retrieval, and the like are etic, although the specific way these mechanisms operate may well be emic. For example, all people have a long-term storage for memory (except in unusual circumstances related to illness or disease) and are able to access memories within such a storage region (procedural effects). The content of the memory structure is idiosyncratic (specific memories) to the individual.

The second element of cultural intelligence refers to the motivational basis for CQ. For successful adaptation to a new cultural setting a person must be able to cognize and understand a culture, and, at the same time, feel motivated to engage others in the new setting. It is not enough to be able to figure out why young male college students hold one another's hands in China during class lecture, or why German MBA students look repeatedly at their watches in anticipation of the onset of class; one must be motivated to adapt and adjust to the cultural setting. Without such motivation, adaptation will not occur, so we argue that this does not reflect CQ. In a sense, we are attempting to capture some of the direction implied by Sternberg and his idea of tacit knowledge or practical intelligence. That is, without including an element of motivation it is limiting to talk about intelligence as defined by adaptation to one's environment. If an individual is unmotivated and will not engage the world, why would we expect to find evidence of adaptation? In our usage, we will look at several aspects of motivation, including self-efficacy expectations, goal setting, and self-concept/-evaluation through identity.

The final element of our approach refers to the capability for an individual to actually engage in behaviors that are adaptive. Perhaps due to our organizational research backgrounds, we believe that cultural intelligence is not meaningful unless an individual is able to generate the behaviors needed to reflect cognition and motivation. Similar to the adage of "deeds versus intentions," we believe that CQ reflects a person's ability to generate appropriate behaviors in a new cultural setting. Without this aspect of CQ, a person may be able to cognize what is appropriate in a given culture and feel motivated to move forward but he will be unable to do so if the appropriate response is not in his repertoire. For example, you have just visited your friends in Germany and they are taking you to a nice restaurant. They kindly order the food for you, and you are served what appears to be a healthy portion of meat. Not wanting to risk catching Mad Cow disease from tainted beef, you politely ask your hosts the origins of the beef (explaining your concerns). At this, your hosts heartily laugh with one another and point out that you have no worries whatsoever because you haven't been served beef . . . you have been provided a nice cut of horsemeat (a delicacy gaining popularity in Europe as a result of Mad Cow scares, foot-and-mouth disease, and other plagues for the twenty-first century). Despite your understanding of why you have been given horsemeat and your desire (motivation) not to offend your hosts, you find yourself unable to eat the dinner. This vignette reflects the difficulty of cultural encounters from a behavioral perspective. That is, many of our reactions in cultural settings are sufficiently ingrained that we may find it very difficult to overcome our reinforcement history. There may be other instances for which we are unable to generate appropriate responses such as linguistic nuances. The first author (a nonnative Chinese speaker who has attempted to learn Chinese) had a well-intentioned Western colleague who had prepared a careful speech in Chinese to show his Chinese colleagues his appreciation for their hospitality. After listening to the American's speech one of the Chinese professors commented (well out of hearing range of the American so as to avoid offending him), "I really appreciated his trying to give his speech, but I had absolutely no idea what he was saying." The American seemed unable to produce the appropriate tones during his speech even though he had the correct "words." Our point is that without effective execution, a person's CQ is not realized. CQ requires effective adaptation to cultural circumstance—not merely one's thoughts, intentions, or wishes.

We describe these three aspects of CQ a bit further in the following overview of the chapters and describe them in great detail within the chapters themselves.

## OVERVIEW OF OUR APPROACH

An emphasis on the Western psyche detracts attention from the importance of cultural and national differences in people's values and beliefs, and how these differences may affect work behavior. More importantly, many of the cues used by people from one culture to ascertain another person's emotional state (for example, empathize) are radically different across cultures. A "friendly" smile for a Canadian may seem straightforward until she encounters a Thai employee for whom more than twenty separate smiles provide subtle cues for radically different frames of mind (Komin 1991). A person having high emotional intelligence may be entirely incapable at generalizing across cultural settings given such confusing signals.

What then enables some people to function as cultural chameleons while others flounder? Our argument is that a separate category of social intelligence reflects a person's capability to gather, interpret, and act on these radically different cues in order to function effectively across cultural settings. We refer to this capability as Cultural Intelligence, or CQ.

The focus of our book is the development and exploration of the concept of Cultural Intelligence (CQ). We seek to define CQ and provide a general conceptual framework for its assessment and application to intercultural interactions. CQ reflects a person's adaptation to new cultural settings and capability to deal effectively with other people with whom the person does not share a common cultural background and understanding. This is an important aspect of how our construct differs from existing approaches to the study of social intelligence including Salovey and Mayer (1997) as well as Gardner's work on multiple intelligences (1983). When people interact with others from different cultural backgrounds, many, if not most, of the common cues for understanding and predicting the other's moods, emotions, and intent are unavailable or easily misattributed. However, some individuals are able to quickly integrate themselves into social gatherings, command effective action from work units, and so forth, whereas others are quite ineffective. Many times the difference between these successful and less successful individuals is not a matter of motivation alone; some people have an enhanced capacity to step into a culturally foreign context and quickly determine the right thing to do at the right time.

We develop and describe the nature of cultural intelligence along with its relationship to other forms and frameworks. In our approach, CQ can be thought to consist of three fundamental components: cognitive, or a person's ability to develop patterns from cultural cues; motivational, or a person's desire and directed effort to engage others and follow through; and action, or a person's capability to appropriately enact selected behavior in accordance with cognition and motivation.

Although the mapping of our framework onto existing frameworks is not a perfect one, one theory that we find useful in organizing our thinking about cultural intelligence is presented in Triandis's (1972) treatise, *Analysis of Subjective Culture.* This model concerns itself with the way people in different cultures perceive their social environment as well as the impact of environmental factors on these processes. Perhaps the most notable aspect of Triandis's model is its breadth in trying to assess the relations among environment, social environment, values, and psychological process.

The distal antecedent of subjective culture is physical environment—resources as well as historical events. The physical environment has a direct impact on a society's economic activities, which, in turn, influences more proximal antecedents, such as occupations and labor structure. For example, take the relationship of population to the use of labor-intensive production methods. In China, it is common to see several score of laborers dig a ditch for a drainage system rather than a small crew using earth-moving equipment. The combination of ample labor and scarce technological resources leads to production methods that emphasize labor-intensive methods.

Historical events have an impact on the social and political organizations that evolve in a society as well as more proximal aspects of culture including language, religion, location, and feedback from one's own behavior. For example, the impact of the Second World War on Japan resulted in a shift from a militaristic orientation to an industrial one. The emphasis on rugged survivalist characteristic of settling the western part of the United States is thought to have contributed to the strong individualistic orientation of Americans. Historical events play a role in the type of organizations that evolve in a society as well. The Chinese Cultural Revolution under Chairman Mao led to an ideology of the commune, egalitarianism, and focus on the welfare of Chinese society. The profound impact of the revolution on Chinese society serves to illustrate that historical events can have marked effects on a society even during a relatively short time frame.

Triandis posits that proximal antecedents have an impact on pancultural psychological processes, which, in turn, create subjective culture. For example, religion and language influence the types of categorizations that individuals make, the number of categories they use, as well as the consistency with which a particular label is assigned to a particular object. Little (1968) showed that Mediterranean people prefer shorter distances for social interaction than northern Europeans. This difference in social behavior reflects different religious norms concerning interaction and the impact of these norms on cognitive scripts for behavior in a social context. Occupations and social settings existing in a culture influence aspects of subjective culture as well, since roles that individuals enact as well as tasks that they perform are dependent on their occupations. For example, occupations such as the trades (for example, carpentry) that involve mentoring and apprenticeship encourage hierarchically differentiated roles within the context of a communal group (Van Maanen and Barley 1984).

The impact of basic psychological processes such as learning (cognitive and instrumental), categorization, and conditioning on subjective culture is illustrated through a variety of more specific sociological and psychological constructs including roles, tasks, norms, cognitive structures, values, affect, behavioral intentions, habits, and utilities.

The determinants of action in Triandis's model are an individual's behavioral intentions and habits. Patterns of action are a function of behavioral intentions, which are influenced by subjective culture. It is the link of subjective culture to behavioral intentions that provides an explicit relation that is lacking in value-based models. In a subjective culture approach, values influence behavioral intentions through an individual's affective states as well as cognitive structures (although values are reciprocally determined by cognitive structures). Patterns of action and behavioral intentions resemble other information-processing models (for example, Ajzen and Fishbein 1980), although many of the details concerning roles, norms, and tasks remain as unspecified antecedents in these other models. Triandis adds nonvolitional antecedents of action not typically incorporated in others' models as well. Habits, he argues, represent the impact of repeated feedback concerning particular actions. In associative cultures, linguistic cues often convey rank among people, and these nuances of language are enacted habitually. Likewise, social behavior and protocol such as social distances reflect habit rather than cognition. Anyone coming from a culture that uses a large social distance knows how uncomfortable it can be to interact with someone "face to face" who is from a small social distance culture. Social habits clearly are reaffirmed by cultural values and norms.

Thus, the core of Triandis's model is the specific action of behavioral patterns as a function of distal and proximal antecedents that impact subjective culture. His model captures the relation of macro-, societal-level influences on specific individuals' responses through psychological process. His model captures our three elements of cultural intelligence in many ways. Cognition forms the core of Triandis's subjective culture model along with motivation (cultural values and perceived utility) and behavior (reflected in habits and behavioral repertoire). Our cultural intelligence framework can be thought of as a subsystem of this wide-ranging model with an emphasis on understanding how and why individuals adjust differentially to varying cultural circumstances. We think that this model is a useful way of understanding how the facets of cultural intelligence operate together.

In our earlier example of the "Thai smile" interpreted by the Canadian three facets operate. First, she needs to observe the various cues provided in addition to the smile gesture itself (for example, other facial or bodily gestures, significance of others who may be in proximity, the source of the original smile gesture) and to assemble them into a meaningful whole. Second, she must have the requisite motivation (directed effort and persistence) to persevere in the face of incomplete or difficult circumstance. Third, she must choose from among her behavioral repertoire to respond using culturally acceptable actions (to the recipient of the action). If any of these three facets are lacking, then a person is likely to be ineffective in dealing with people from different cultural backgrounds. Thus, a high CQ person has capability with all three facets.

What seems to be lacking in the research literature is an integration of the broader cultural and national contexts in which people live and work with this emerging emphasis on cross-border work. To make things even more complex, people from different cultures and/or nations, who do not necessarily share a common way of interpreting and evaluating situations, are more likely to respond dissimilarly to the same context. A work unit consisting of several Malaysian, Thai, and Australian managers will exhibit markedly different reactions to the same organizational intervention as a group consisting of managers from Brazil, the United States, and Germany.

Unfortunately, current theories of psychology and management do not adequately provide a conceptual framework for understanding how culture and organizational behavior are related to human intelligence. This lack of adequate theoretical frameworks for understanding the moderating effect of nation or culture leads us to the development of a new model for that purpose. What is missing from the research literature is a theoretical framework that can be brought to bear in explaining the differential successes that we observe as people interact interculturally. We posit that this differential success is attributable to varying levels of cultural intelligence possessed by people. We explore the fundamental nature of cultural intelligence, its components and composition, and its relationship to other componential frameworks of intelligence.

Thus, our primary focus is the development and presentation of a new conceptual framework that can be brought to bear for researchers seeking new research topics and directions concerning international functioning for people.

## ORGANIZATION OF THE BOOK

The book is organized into two major sections: Part I consists of a general introduction and presentation of the theory of cultural intelligence; Part II consists of measurement and application issues in using the concept of cultural intelligence in a work context.

In Chapter 1 we discuss the nature of international work and the increasing need to create interdependent teams of diverse people. We provide a general context of the key problem focused on in our book—understanding social actions in a global context. Our focus is on how existing models tend to view intelligence as a culturally embedded construct, and we emphasize the need to develop a way of describing how some people are able to move among various cultures and effectively integrate themselves. This is not the same as the thrust of cross-cultural researchers such as Berry (1971; Berry and Annis 1974) for which intelligence is presented as a culturally defined emic. Rather, our emphasis is on an etic aspect of intelligence that provides individuals with the capacity to operate across various cultural boundaries.

In Chapter 2 we describe the need to integrate various types of literatures on intelligence for a better understanding of how intelligence operates in an intercultural context. We review the nature of intelligence as a general construct with a focus on providing current perspectives on intelligence using unidimensional versus multidimensional models, current assessment methods, and so on. This chapter includes a discussion of a multiple intelligences framework such as Gardner's multiple intelligences concept, Salovey and Mayer's social intelligences, and Sternberg's tripartite view along with a discussion of social and emotional intelligence.

Chapter 3 consists of a presentation of our general model concerning the nature of cultural intelligence and the model's functioning in an international organization. We provide construct definition and a general overview of the model followed by more specific sections on facets of the model.

Our general model consists of several elements including cognitive, motivational, and behavioral bases of cultural intelligence. That is to say, we argue that cultural intelligence is best thought of as consisting of three distinctive elements. The first element refers to the cognitions that we have concerning other cultures. This is not suggesting content-specific knowledge much like Sternberg and his colleagues suggest with their notion of tacit knowledge (Sternberg 1997; Sternberg and Wagner 1994; Sternberg, Wagner, Williams, and Horvath 1995). Tacit knowledge reflects task-specific information and skills that we believe are limiting in the case of international or cross-cultural experiences as we describe later in our book. Our focus is on cognitions and relevant cognitive processing of general and setting-specific knowledge. This is a critical distinction between our concept of cultural intelligence and related concepts such as social or emotional intelligence. That is, a person may well have content-specific knowledge but is woefully inadequate at transferring that knowledge at a general level to a new setting. Individuals having high cultural intelligence, however, have the cognitive capabilities to transfer learning and acquire key information across radically different settings and domains. Thus, the cognitive aspect of our model refers to the thoughts and processes through which individuals acquire and develop their coping mechanisms and cognitive structures (for example, schema, plans, and scripts) across various cultural boundaries.

The second element of our model refers to the nature of a person's motivation with regard to cultural engagement. As we described earlier, our conceptualization of cultural intelligence is not merely as a capability or ability to adapt to the environment as posited by many researchers (for example, Sternberg et al. 1999) without regard to motivation. That is, by our usage, even if I have the relevant cognitive skills for processing information about a new culture this does not constitute cultural intelligence without the additional characteristics of motivation and behavioral repertoire. Being culturally intelligent is not merely knowing how, for instance, to discern new patterns of social behavior in order to figure out why someone just poured a bit of their drink on the ground (for example, giving ablutions to the honored dead versus sloppy actions versus disrespect of the host). It requires that a person have the motivation to respond to the various situations confronting him or her across these settings. As we discuss in Chapters 3 and 5, the motivational aspect of our framework requires an understanding of people's motives and self-guided actions. In this regard, we draw from relevant motivation theory including Bandura's Social Learning Theory (Bandura 1997) as well as Locke and Latham's Goal Setting Theory (Locke and Latham 1990) and the first author's past work with Erez (Erez and Earley 1993). We present the motivational aspect of cultural intelligence as both an interest in dealing with new cultures as well as perceived capability of doing so. In this regard, we tie our presentation into the extent work by Bandura, Locke, Markus and Kitayama among others.

The final section of Chapter 3 focuses on the behavioral consequences and repertoire of cultural intelligence. Let us assume for a moment that an individual possesses the cognitive capacity and skills needed to figure out what is going on in a new cultural context. Let us further assume that this person is motivated and has a strong sense of efficacy with regard to cultural engagement. Does this ensure effective action within a new cultural setting? No it does not. The problem may lie in a person's existing repertoire for behaving in a new culture along the desired lines. For example, imagine that this is your first encounter with an Ashanti businessman from central Ghana. A friendly form of greeting in Ashanti culture is to clasp hands in a handshake and slowly pull one another's hands away from each other rubbing palms together. As you do so, you move your middle finger and thumb around the other person's middle finger and thumb in a "snapping one's fingers" gesture and as the two hands physically separate at the fingertips, each person makes a snapping sound of the interlaced middle fingers and thumbs (overlapping one another). Our astute traveler may know about this custom, be inclined to follow it, and even attempt it. However, such an action is likely to end in failure for a number of times. For some people, it is not at all easy to acquire such a behavior successfully, so a culturally intelligent action is not achieved. Does this mean that our sojourner is not culturally intelligent? By our usage we would say yes. It is not sufficient to have knowledge of another group's ways of dealing with the world. One must be able (and motivated) to use this knowledge and produce a culturally appropriate response. In this sense, our notion of cultural intelligence captures Sternberg and Wagner's notion of tacit and practical knowledge with an action orientation. (Sternberg's formulation of the Triarchic Theory of intelligence has much to offer, and we draw our inspiration for his work. As we describe in Chapter 3, his Triarchic Model has three subtheories including a componential, experiential, and contextual subtheory. The componential subtheory includes a performance component to it that focuses on the proper execution of actions similar to our behavioral element.)

Chapter 4 presents a basic definition of culture used in our approach along with various facets of culture. Our emphasis is on the various ways that people can acquire and process information to solve problems. In particular, we look at various forms of reasoning in relation to CQ emphasizing analogical and inductive reasoning as requisite talents of the high CQ person.

Our view of the cognitive systems involved in CQ is that both declarative and procedural knowledge operate and exist at multiple levels of analysis and that this is one of the ways that someone with high CQ is able to figure out the appropriate rules and implications for behavior within a new cultural context. Cognizing and knowledge operate at a metalevel of organizing, and this is the key to cultural adjustment and enactment. That is, a person with high CQ has the capacity to "learn to learn" in a new cultural setting. This is not merely an application of existing knowledge to a given situation as one might expect in the case of a person with high social intelligence operating within his own cultural milieu. High CQ people are able to come into a radically unfamiliar social environment and figure out how to learn the appropriate cues to attend to in order to figure out what is actually happening within a culture. This is not simply (although even this is not terribly simple) using one's personal experiences as a way of judging a situation (for example, "I was in a related situation a few years ago and what seemed to work was X," or "Someone reacting this strongly must clearly be angry and so I need to help diffuse this anger"). It means looking at a new cultural setting afresh without imposing a number of existing ideas about what things must mean or how one needs to operate to proceed.

The discussion of CQ from a motivational perspective emphasizes a person's values, preferences, and goals as central. The value and preference structure gives rise to particular motives and these are, in turn, the impetus for setting goals and direction of action. In Chapter 5 motives are discussed in relation to a person's desire to integrate into his or her work unit as well. We draw from Status Theory (Hughes 1971) as well as Categorization Theory (Tajfel 1982a; Tajfel 1982b; Tajfel and Turner 1986)) and Role Identity Theory (Stryker 1980, 2000; Stryker and Serpe 1982) as a means of understanding how people's motives may differ with regard to CQ.

In addition, we discuss the nature of motivation and CQ from a capabilities perspective, namely, the role of self-efficacy expectations and goals in understanding adaptation. Put simply, if a person does not have sufficient efficacy to enact a given set of actions then we would not expect high CQ. That is, CQ reflects a person's motivation to proactively engage their new environment, and this is best understood using self-efficacy concepts (Bandura 1982, 1986, 1997; Earley 1999; Earley and Randel 1997; Erez 1997; Erez and Earley 1993; Locke and Latham 1990).

Finally, the action component of our framework looks at a person's ability to draw from an existing repertoire (or to create new actions) to translate motives into successful responses. That is, if someone has analyzed the situation accurately (cognitive) and is motivated to respond (motivation), how might he or she actually respond in a culturally appropriate fashion?

In Chapter 6, we first draw from Hall's earlier insights about social interactions in cross-cultural encounters (Hall 1993) and Goffman's idea of "life as drama" on the importance of behavior of self in everyday life (Goffman 1959). We then draw from Schlenker's seminal work on theory of self-presentation to explain the process in which an individual enacts social behaviors in any culture (Schlenker 1980).

Part II takes up measurement and application of the theory we propose. Chapter 7 describes various approaches taken by others to the assessment of intelligence from various approaches. We then introduce and describe an initial assessment of our development of an instrument designed to measure CQ using a field study from an internationally diverse sample of managers. Our approach is modeled after the procedures described by Sternberg and his colleagues in their development of a tacit knowledge instrument (Sternberg 1997, 2000; Sternberg et al. 1999). We began our assessment by collecting a relatively large pool (about two hundred) of critical incidents given by managers concerning how they adjusted to a new cultural setting. They were asked specifically to relay to us one successful and one not so successful anecdote from their recent work experiences. We analyzed these incidents to determine what appeared to be key aspects of CQ to predict success versus failure. Next, we combined this new instrument with some additional tests of problem solving and logical reasoning to assess the cognitive aspects of CQ. To this, we added the motivational dimension of CQ through the use of Bandura's self-efficacy framework. In a relatively preliminary fashion, we are able to report on some of the utility of our assessment approach although we shall do more extensive testing of this instrument in our subsequent research program on CQ.

In Chapter 8, we focus on using the concept of CQ to aid an expatriate manager with a new work assignment. We describe the role of CQ as an assessment device for a manager to understand where he or she might have difficulties in dealing with people in an international context. Our focus in this chapter is on the use of CQ for effective functioning with a multinational work team since this context is highly appropriate for a concept such as CQ and it is a timely emphasis as well. That said, how is it that people having a high CQ are able to utilize the various human resources around them in a multinational team. How does CQ fit into a company program that would enable team leaders to make the most of the human resources around them? Our discussion looks into the way that high CQ people are able to adapt themselves as well as adapt others from varying nationalities in order to develop a commonality of views and procedures needed for a multinational team to be effective (Earley and Francis 2002; Earley and Mosakowski 2000).

We follow up Chapter 8 with an emphasis on understanding how CQ can be used for intranational contexts as well as international ones. That is, the concept of CQ is wholly appropriate for understanding the importance of cultural diversity within an eclectic country. In Chapter 9, we explore further the nature of diversity and how various role identities operate to influence interpersonal interactions within a given nation (but across cultural groups). Are these traits organized into some sort of hierarchy? This is, of course, somewhat debated but generally agreed upon. If so, how does CQ better equip a person to discover the nature of these hierarchies and act on them? An important aspect of one's social environment is reflected in the various identities and persona that people adopt for themselves, and someone having high CQ is able to identify and utilize such information for them. We draw from Stryker's Role Identity Theory as a means of understanding how these hierarchies are constructed and how they may vary culturally and personally. Although there has been a great deal of attention directed toward diversity and demographic characteristics and their implications for organizational functioning (for example, Tsui, Egan, and O'Reilly 1992), little research has focused on the nature of the trait hierarchies and their construction and ordering. In a recent paper, Earley (1999) looked at the trait hierarchies for four national samples (English, French, Thai, and American) and used these hierarchies as a way of understanding status and group decision making. A few other researchers have grappled with these issues as well (Mulder 1977; Sidanius, Pratto, and Rabinowitz 1994). To date, however, we have no systematic way of understanding how these hierarchies are constructed and influenced by cultural context or setting. In this chapter, we explore these hierarchies in relation to CQ, not to determine the causes of the hierarchies (which is well beyond the scope of our presentation in this book), but to link them to adaptation by the high CQ individual. It is this person who is able to enter into a new cultural setting and quickly understand how role identities play out in status and action within the cultural group and subgroup.

Chapter 10 presents the results of the various relationships described in the rest of the model. The discussion focuses on the patterns of interaction, expectations of intent, and action as causal influences of various organizational processes in an international context.

Now that we have provided a general organizing framework for cultural intelligence and a preliminary discussion of its assessment and application we turn our attention to a more elaborate description of its utility for work organizations. Having established a preliminary assessment tool in the previous chapter, we now look at how this tool might be used as part of a selection system so that companies can better predict who will be most effective from an applicant pool for cultural adaptation. We discuss the utility of the instrument as well as how it might supplement current selection systems used by companies as they choose expatriate employees for future assignments.

We conclude the book with a discussion of the general significance and implications of this research for the fields of psychology, sociology, and business. In the final chapter we describe how the concept of CQ is useful for expanding our knowledge of intelligence as a general concept using cross-cultural psychology. Although there has been a call for such expansion and integration (Berry 1974; Miller 1997; Smith, Peterson, and Misumi 1994) of ideas, few formal attempts have been made to do so. One might argue that recent speculation by Howard Gardner (1998) to capture additional forms of intelligence in his work (for example, naturalistic or spiritualistic forms) provides some insights concerning cultural influences. However, this is clearly not the center of his focus, and we believe it is meritorious of further study and thought.

Our topic is an important one as well from an organization's perspective given the global expansion of business. In our concluding chapter we discuss some of the implications of CQ for future work on international organizations and international teams. This discussion applies as well to multinational teams and related topics within companies (Earley and Laubach 2000; Earley and Mosakowski 2000). We close our book by suggesting a number of new directions that researchers might follow with our CQ framework as well as some implications for practice.

## SUMMARY

This introductory chapter was written by the first author during the peak of the U.S.-China "crisis" concerning a Chinese jet fighter that was lost when it collided with a U.S. reconnaissance airplane. The result of this incident was that the Chinese detained twenty-plus aircrew from the U.S. plane (the Chinese fighter pilot was lost in the incident) and for quite some time the government refused to allow the detainees to return to the United States. What the Chinese government had asked for was a formal apology from the United States admitting their responsibility for the incident. This incident created tremendous animosity on both sides of the Pacific Ocean; each party accused the other of being uncooperative and provocative. The stance taken by many Americans at the time was that there was no reason for the United States to admit that they had done something wrong unless there was evidence that such wrongdoing had taken place.

The first author happened to have a meeting with an exchange student from Hong Kong who expressed his disappointment in the Americans' unwillingness to admit their wrongdoing even if they were not "wrong" (debate continues concerning the true culpability of the incident). He said that for sake of face, the United States should admit responsibility because they clearly have more *mianzi* (Earley and Randel 1997), or social status. As a result, he explained, the Americans have a burden to admit wrongdoing and, in doing so, they would gain even more mianzi in the eyes of the Chinese. Whether this is the case, our point is that many Americans would view admitting mistakes as a sign of weakness, and that would contribute to the loss of face. However, this student argued that in China when a more powerful person admits an error to a less powerful person, the result is that the increase of face given to the weaker party is returned several times over through mianzi afforded to the more powerful party by the weaker one.

How can we comprehend such complex thinking across such a wide range of cultural settings throughout the world? Are some people more able to do so than others? More importantly, can we teach skills to managers so that they are able to do so? These are the questions that lie at the heart of our book. We attempt to bridge a gap in the organizations literature concerning why some people fail to adjust to new cultures if they seem very empathetic and sensitive in their own cultures. Further we seek to understand the very nature of intelligence itself and how cultural context helps to shape it. Through this approach we believe it is possible to expand and clarify the most fundamental of human characteristics—intelligence.

# 2

# CONCEPT OF INTELLIGENCE

> Looked at in one way, everyone knows what intelligence is; looked at in another way, no one does. Put another way, people all have conceptions—which also are called folk theories or implicit theories—of intelligence, but no one knows for certain what it actually is.
>
> —STERNBERG, HANDBOOK OF INTELLIGENCE

The concept of intelligence continues to attract much academic research, particularly among psychologists, whose inquiry into individual differences or differential psychology includes a sustained fascination with the assessments of intelligence that predict superior human behaviors. Intelligence has also been a focus of research among anthropologists and sociologists who contend that intelligence can best be researched only as a function of one's culture and society, because societal values and beliefs determine the very nature of intelligence (Sternberg 1990). The concept of intelligence is alluring. In common parlance, we acknowledge and respect a person as intelligent when he or she appears to possess certain qualities that enable him or her to adapt effectively in the environment, to learn from experience, to exercise various skills, and to succeed in various social and worldly endeavors. However, despite decades of sustained inquiry, intellectual debate, and academic rigor, intelligence as a theoretical construct remains difficult to define and conceptualize. Many attempts have been made to converge on a definition and measurement of intelligence, but the concept remains slippery.

Two separate generations of intelligence researchers and experts have gathered in major symposia on intelligence, first in 1921 and then in 1986. The main objective of both symposia was to develop a consensus on the definition and meaning of intelligence as a construct. Despite the gap in time between these gatherings, both attempts showed that intelligence, as a construct, remains surprisingly elusive. In fact, there were as many definitions of intelligence as they were experts present in the symposia. As a summary of the 1986 symposium, Sternberg (1986) developed a valuable and coherent framework that organized the diverse views of intelligence. We have adapted that framework to review the models and theories of intelligence. Based on it, we classify contemporary views of intelligence as a characteristic of the individual, the context, and the interaction of the individual and the context. We conclude by asserting that the theory of cultural intelligence is best conceptualized from the interactional—that is, individual × environmental perspective of intelligence—because, by definition, cultural intelligence refers to a person's capability to adapt effectively to *new cultural contexts* and therefore represents a form of situated intelligence where intelligently adaptive behaviors are culturally bound to the values and beliefs of a given society or culture.

## TWO MAJOR SYMPOSIA ON THE NATURE OF INTELLIGENCE (1921 AND 1986)

### The 1921 Symposium

The first deliberate and concerted attempt to arrive at a consensus among a community of psychology experts was in a symposium convened more than eighty years ago. The 1921 symposium brought together fourteen prominent researchers in educational psychology on intelligence to debate on the concept and measurement of intelligence (Sternberg and Detterman 1986).

At the symposium, definitions for intelligence were wide-ranging. Some experts defined intelligence very broadly as a certain type or level of mental ability such as the ability to adapt or to learn, the ability to carry out abstract thinking, the ability to acquire knowledge, the ability to adapt oneself adequately to relatively new situations in life, the ability to learn or to profit by experience. Other experts defined intelligence as sensory capacity—the capacity for perceptual recognition, quickness, range or flexibilities, alertness or quickness in response. Another school of thought defined intelligence as a broad range of knowledge or cognitive processes such as sensation, perception, association, memory, imagination, judgment, and reasoning. Still others argued that intelligence should also involve noncognitive attributes such as perseverance. Because of the lack of convergence in the understanding of intelligence as a conceptual entity, myriad suggestions and proponents of alternative measurements of intelligence came forth. In 1923, Boring concluded that intelligence can best be defined as "what the tests test" (1923).

## The 1986 Symposium

Sixty-five years later, Sternberg and Detterman organized a similar symposium with a group of more than twenty contemporary researchers in intelligence. The 1986 definitions revealed greater sophistication and integration of ideas of intelligence, but the field continues to conceptualize intelligence as complex, multifaceted, and spanning multilevels.

As a way to bring coherence to the diverse viewpoints of the participants in the symposium, Sternberg (1986) developed a broad conceptual framework on intelligence to embrace and capture each viewpoint. The conceptual framework organizes contemporary theories and models based on the foci of intelligence—that is, the level of analysis of which intelligence is a characteristic. Broadly, intelligence is theorized and measured as an intraindividual attribute, or as a characteristic of the context or environment, or an attribute located at the interaction between individual and his or her context/environment (see Figure 2.1 for an abridged adaptation of the framework).

The most common view of intelligence conceptualizes it as an attribute either at the biological, mental, motivational, or behavioral level. At the biological or physiological level, the focus on neuropsychology, psychophysiology, and behavioral genetics of intelligence has led to the quest for understanding the biological processes related to intelligence and for locating the genetic code for intelligence. Ridley (2000), for example, showed that the latest genome project aims to discover the exact genetic coding for identifying the "intelligent" gene in humans.

I. Intelligence as Attribute of Individual
  A. Biological Level
  B. Mental Functioning Level
    —Cognitive (information processing models of ordinary and meta-cognition)
    —Motivation
  C. Behavioral/Domains of Intelligence
    —Academic
    —Non-academic (social, emotional, practical)
II. Intelligence as Characteristic of Context or Environment
III. Intelligence as Interaction Between Individual & Context

**Figure 2.1.** Organizing Framework on Intelligence (adapted from Sternberg, in Sternberg and Detterman, 1986)

At the level of mental functioning, intelligence is presumed to reside in the cognitive or the motivational realm. In the cognition functioning, researchers focused on the processes of metacognitive or cognitive processes that define intelligence. Metacognition refers to the study of knowledge about and control over one's cognition; cognition refers to the knowledge and process of knowing itself (Flavell 1979), while the processes of ordinary cognition include selective attention, learning, reasoning, problem solving, and decision making.

Motivational theorists of intelligence focused on the effort and the direction of energy toward mental functioning. Proponents of the motivational theories of intelligence argue that it is not enough to focus on the cognitive ability of a person; one must also examine the underlying motivation to cognize or to channel one's energies toward cognitive behaviors.

Behavioral theorists of intelligence contend that intelligence resides in one's behavior rather than (or in addition to) the mental functioning that leads to these behaviors. Behaviorists tend to focus on domains or contexts in which intelligent behaviors are observed. The most frequently researched domain is in the academic or school setting, where intelligence is defined as behavior exhibited in schoolwork in traditional subjects such as language, mathematics, and natural and social sciences. Not until the 1980s, after the influential work of Howard Gardner, who propagated the idea of multiple intelligences (1983), did other forms of behaviors such as art making, dancing, and musical performance become deemed "intelligent" behaviors in school settings.

In nonacademic settings, other intelligences have been identified. They include social, emotional, and practical intelligence. Social intelligence is defined as behaviors exhibited within as well as between personal interactions. Social intelligence includes both self- and other-awareness and knowledge and processes of knowing and behaving. Questions about social intelligence include how a person uses intelligence to facilitate interaction with and understanding of him- or herself. Emotional intelligence is defined briefly as the ability to monitor one's own and others' emotions to guide one's thinking and actions (Salovey and Mayer 1990; Goleman 1995), while practical intelligence includes behavior exhibited in one's occupation and in one's daily living (Sternberg and Wagner 1986). Occupational aspects include knowing how to perform one's job effectively, how to get ahead on one's job, and how to make the most of the job one has. Everyday-living intelligence includes knowing how to perform daily activities, such as cooking and maintaining a household.

Moving beyond an individual focus, other researchers and theorists conceptualize intelligence at the contextual level of the environment. Intelligence is seen not as residing within the individual but within the context, as a function of one's culture and society. Theorists adhering to the cultural view of intelligence share the worldview that intelligence is relativistic with respect to culture; hence, it is impossible to understand intelligence without understanding culture. In essence, culture determines the very nature of intelligence and who has what levels of it (Berry 1974; Ruzgis and Grigorenko 1994). Finally, some theorists embrace the interaction of individual and contextual perspective. They assert that individuals do not think or behave intelligently in a vacuum. Rather, people may be differentially intelligent in different contexts, depending on the demands of these various environments (Sternberg 1988; Ceci 1990).

Based on a summary of themes culled from the various definitions of intelligence, Sternberg and Berg (1986) observed that although there was consensus that intelligence is not easily definable, and may not be just one unilateral construct, researchers agree on the most frequent attributes of intelligence. First, at the biological level of analysis, an intelligent person must have control and regulation over elementary sensory organs including perception, sensation, and attention. Second, at the mental-functioning level, intelligence represents higher-level components of cognitive functioning, such as cognitive processes of representation, abstract reasoning, problem solving, and decision making. Third, and also within the realm of mental functioning, intelligence must embrace metacognitive and executive processes. Thus, a person is intelligent not only in what he or she knows, but in his or her ability to know how to know. Fourth, an intelligent individual must possess some form of crystallized, formal, learned declarative, and/or experiential procedural knowledge in a domain or domains. Fifth, in terms of behavioral manifestation of intelligence, intelligence must be defined in some overt forms behaviors—either verbal or nonverbal, because one of the core definitions of intelligence is the ability to adapt to one's surroundings as well as to new stimuli or environments. Sixth, and finally, the content of intelligence is culturally bound, that is, intelligence is an attribute of an individual operating within the culture of an environment that defines what intelligent behavior is. What is deemed intelligent behavior or abilities in one society, culture, or environment may not be deemed intelligent in another.

Below, we elaborate on each of the perspectives of intelligence at the individual, environmental, and interactional (individual × environmental) levels. We assert that our concept of cultural intelligence can best be conceptualized from the interactional (individual × environmental) perspective of intelligence. We see cultural intelligence as a form of situated intelligence, akin to the idea of situated cognition (Lave and Wenger 1991; Lave 1988), where situated intelligence represents a form of intelligence that is a function of the interaction of intraindividual cognitive mental abilities and motivation, with the specific environmental context in which the individual is situated, such that individuals with cultural intelligence will adapt performances to culturally specific behaviors demanded or required of the cultural values and beliefs of the specific environment.

## INTRAINDIVIDUAL THEORIES OF INTELLIGENCE

### Biological Theories of Intelligence: The Neuropsychology, Psychophysiology, and Behavioral Genetics

The biological theories of intelligence focus on the brain as the key organ where intelligence is located. There are a number of major biological approaches to intelligence. Neuropsychological approaches seek to understand intelligence in terms of the size and structure of the brain. Psychophysiological approaches seek to understand intelligence in terms of how the brain functions rather than how the brain is structured. The primary ways in which data is collected on how the brain functions include electroencephalographic (EEG) waveform measurements of ongoing bioelectric activity, measurement of blood flow to various portions of the brain during thinking, and the level of cerebral glucose metabolism of the brain during a cognitive activity. In the behavior genetics approach the focal of interest is on the ongoing debate of nature versus nurture of intelligence, and how much of intelligence is genetically endowed.

#### *Neuropsychological Approaches*

The neuropsychological approaches to studying intelligence derive their earlier history from phrenology, a line of study engaged by anatomists who believed that human intellect is correlated with the size, structure, and shape of the human skull. In a meta-analysis of fifty-four empirical studies that correlated head size with IQ scores among humans, Vernon, Wickett, Bazana, and Stelmack (2000) found that there was no negative correlation between head-size and IQ scores. Across all samples, the correlations ranged from .02 to .54 with a weighted average of around .20. In correlational studies, external dimensions of human skull to actual brain volume hovered around .60 in adults and above .90 in infants and children. In comparative psychology that studies animals including humans, Jerison (1982) found that the relationship between brain size and intelligence appears to be greater when compared across rather than within animal species.

With advancements in scanning technology in the form of computerized axial tomography (CT) and magnetic resonance imaging (MRI), it is possible to obtain more accurate measures of brain volume. The weighted brain volume-IQ scores were found to hover around .40. While interesting correlations are found between actual measures of brain structure with IQ scores, what the correlation means remains largely underexplored. For example, although it may appear reasonable that large brains evoke higher IQ scores because large brains are known to have more neurons that lead to higher number of synaptic connections and therefore greater cognitive capacity (Pakkenberg and Gundersen 1997), it may also be likely that the correlation is purely spurious, in that both brain size and intelligence could be affected by a third variable, such as nutrition (Vernon et al. 2000).

Another stream of research in the neuropsychological arena is the structure and location of various mental faculties at different parts of the brain. Most advances in this area are based on research on brain-injured patients. For example, it appears that frontal lobes are the crucial foci of intellect since they receive inputs from all regions of the brain. A person with a serious injury inflicted on his or her frontal lobes can achieve a superior level on an IQ test and yet fail miserably in daily living.

One speculation is that a person's fluid rather than crystallized intelligence is located in the frontal lobes (Hebb 1949; Horn and Cattell 1966). Fluid intelligence refers to intelligence associated with the ability to learn new things, to draw influences, and to solve novel problems; crystallized intelligence refers to memory and information that has been acquired in the form of vocabulary and declarative and procedural knowledge. Because the traditional IQ tests focused primarily on testing one's crystallized intelligence, a person with damaged frontal lobes can score superior IQ tests but is quite incapacitated to control emotion and make simple decisions both at home and in the workplace (Damasio 1994).

In the area of hemispheric specialization, Sperry and his associates and students found that that each hemisphere specializes in very different sets of intellectual functions (Sperry 1961; cited in Springer and Deutsch 1985's extensive survey on right versus left brain). Language ability, for example, appears to be localized in the left hemisphere, while visual and spatial functions appear to be in the right. In terms of information-processing preferences in the two hemispheres, the left hemisphere tends to process information analytically, while the right processes information holistically. The study of hemispheric specialization led to the discovery of some fascinating syndromes where researchers focus on problems of apraxia, the inability to perform movements on request, or agnosia, the inability to recognize familiar objects. For example, when a certain part of the brain is damaged, a condition called alexia without agraphia may occur such that individuals become word blind—that is, they lose their ability to read yet can still write and spell.

### *Psychophysiological Approaches*

One psychophysiological approach involves the use of EEG to measure the electrical activity of the brain during cognitive activities (Sternberg 1990). The basic index for measuring EEG activity is an event-related potential (ERP) wave, where an ERP is an average EEG recording. The standard procedure in relating ERP and intelligence involves correlating the components of ERP waveforms in the form amplitude and latency measures with intelligent tests (Eysenck 1986). An example of an ERP is labeled P300 waveforms. The latency and amplitude of P300 seem to reflect the amount of cognitive resources an individual allocates to a given task. In fact, P300 is shown to be extremely sensitive to the element of surprise that a person experiences when presented with a stimulus.

To link P300 response to intelligence, Schafer (1982) proposed in the theory of neural adaptability that more intelligent people should respond more to novel stimuli than less intelligent counterparts such that more intelligent individuals (as measured by a standard IQ) showed greater P300 responses to novel stimuli than would less intelligent ones. The result suggests that more intelligent individuals have functionally more efficient brains such that fewer neurons are used to process a familiar stimulus compared to a novel stimulus.

Other psychophysiological approaches involve the tracking of cerebral glucose metabolism or cerebral blood flow. The intelligence research measures cerebral glucose metabolism using positron emission tomography (PET). Generally, the studies show that subjects with higher IQs are able to accomplish cognitive tasks with a lower consumption of energy (measured by the level of metabolism of glucose) compared to subjects with lower IQs (Haier, Nuerchterlein, Hazlett, Wu, and Paek 1988; Haier, Siegel, Tang, Abel, and Buchsbaum 1992). In contrast, intelligence research that measures the cerebral blood flow focuses on locating which portion of the brain is being used in cognitive activities or information processing. By tracing blood flows to different regions, researchers are able to ascertain which kinds of cognitive tasks require more crystallized as opposed to fluid intelligences (Horn 1986; Sternberg 1990).

### *Behavioral Genetics*

Perhaps one of the greatest innovations in the study of intelligence that can address the "nature versus nurture" debate in intelligence is in the behavioral genetics approach (see Sternberg and Grigorenko 1997, for review of the area). Behavioral genetics allow one to control for relative effects of heredity and environment and to provide empirical evidence for Hebb's (1949) early distinction between *Intelligence*

*A*, the portion of overall intelligence that is due to heredity and therefore physiologically based, and *Intelligence B*, the portion due to environment and therefore experientially based.

Elegant research designs involving the use of twins and adopted siblings dominate this stream of research. On one extreme, IQs of monozygotic or identical twins who were reared apart are observed, and any differences in their measured IQs were then attributed in large part to the environment, since such twins are genetically identical. At the other extreme, researchers examined the IQs of genetically unrelated individuals who are reared together, such as the case of adopted siblings. Because genes are not shared, similarities in measures of their intelligences may then be explained in large part by environmental influences. Based on research done in the past decade, the general consensus is that the heritability of intelligence explains at least half of the variation in the intelligence test scores, with some studies reporting that as high as 60–70 percent of the variation can be attributed to genetics (Gardner, Kornhaber, and Wake 1996).

The major implication of such a finding is that if one wants to predict a person's psychometric intelligence using the IQ test, it is crucial to know the identity of both biological parents rather than the individual's traits, race, sex, ethnic group, and quality of home or school. It appears that the work by behavioral genetics is able to clearly demarcate the contribution of heredity and environment on intelligence. However, there are certainly boundary conditions such as if an individual is deprived of nutrition or cognitive or affective stimulation, his or her intelligence score will go down (Scarr and Weinberg 1976).

### *Conclusion from the Biological Perspective of Intelligence*

Significant advances on the biological perspective of intelligence have been aided in part by recent medical advancements in probing in vivo the functioning of the brain. The exciting findings of strong correlations between some psychophysiological measures with psychometrically derived IQ tests show promise. The strength of the biological perspective therefore lies in the in vivo measures of brain activity. Yet, a simple correlation between a psychophysiological measure with a psychometrically derived IQ score does not necessarily demonstrate causality. Despite high correlations, one is still unsure of the underlying neural causal mechanisms that cause such associations. The Achilles' heel of the biological perspective of intelligence therefore lies in the lack of theories to explain these empirical observations.

A few biological theories of intelligence have started to appear. For example, Vernon's (1993) neural efficiency theory argues that individual differences in intelligence are reflected in the speed with which the brain and neural system can execute the information process required by cognitive tasks; Schafer's (1982) theory of neural adaptability described above also contributes to the field of research. Sternberg (1990) concluded that research in intelligence will benefit most if intelligence investigators from the biological tradition work with those in cognitive research so that cognitive theories and psychophysiological methods can inform each other and advance the field of research in intelligence.

## Intelligence at the Mental-Functioning Level

Intelligence at the mental-functioning level refers to theories and models that assume the locus of intelligence to reside at within an individual at two aspects of mental functioning: cognitive and motivational (Sternberg 1990).

### *Cognitive Theories of Intelligence*

**Information Processing Models—Processes of the Mental Intellect** Researchers into the information processing models of human problem solving and thinking concern themselves with identifying the processes by which information is encoded, stored, retrieved, and utilized by the brain in performing cognitive tasks such as those presented in traditional IQ tests (Lohman 2000). Rather than conceptualizing intelligence as a complex of mental structures of factors, information-processing theorists focus on detailing the cognitive steps used by a person in thinking or in solving a problem. Adopting an input-process-output paradigm, information-processing models analyze the concept in intelligence in terms of process variables such as attention, filtering, chunking, encoding, retrieving, inputting, processing speed, and input/output storage variables such as working memory and passive storage capacities (Hunt 1980).

Attention and processing speed are two of a number of processing variables that have been subjected to extensive intelligence theory and research (Aiken 1996). Research on attention has been concerned with questions such as whether people with higher intelligence mobilize and distribute their attention more effectively than less intelligent people. Results from a number of studies conducted by Hunt and Lansman (1982) and others showed that individuals with higher intelligence are more flexible in their attention shifting, can mobilize a greater amount of attention, and better utilize working memory to focus on performing a task at hand.

Research on processing speed focused on the question of whether more intelligent people can process information faster than those of less intelligence (Jensen 1982b). Research has found considerable variation in the strength between speed of processing and intelligence, from a correlation of around .40 in verbal domain to a .20 correlation in the nonverbal, particularly spatial domain (Lohman 2000).

Perhaps the most comprehensive theory of intelligence within the information process framework is Sternberg's components process theory (Sternberg 1977, 1985). The theory addresses the internal aspect of intelligence, focusing on the elementary components and mental information-processing mechanisms that constitute intelligence and drive thought and behavior. Drawn primarily for concepts in cognitive psychology, Sternberg's theory identified three major classes of cognitive skills and processes: one higher-order component labeled "metacomponents"; and two lower-order components of knowledge-acquisition and performance. The component process theory purports that people who are more intelligent use more metacomponents in problem solving and have the abilities to acquire the knowledge necessary for problem solving and to encode problems and execute cognitive processes more quickly.

Metacomponents, known also as reflective intelligence, deal with the knowledge and regulation of cognition. Because they govern ordinary cognition, they are by definition, higher-order mental or executive processes that intelligent individuals use for executive planning and guiding their problem-solving efforts. According to Sternberg (1985), individuals with higher g in factor analytic studies tend to use these metacognitive mechanisms more than individuals with lower g. These components, which are common to all tasks, include the ability to:

1. recognize that a problem exists and needs to be solved;
2. recognize the nature of the problem by defining the givens, goals, and obstacles of the problem;
3. select a set of lower-order (that is, nonexecutive) components that will be needed to solve the problem;
4. choose a strategy for solving the problem;
5. select mental representations or mental maps suitable for the task;
6. decide how to allocate attention and other mental resources for use in solving the problem;
7. monitor one's progress, that is, how well one is achieving one's goals during problem solving; and
8. evaluate results once a solution has been reached and to understand internal and external feedback about how well one is doing (Davidson and Downing 2000).

In contrast to metacomponents, both knowledge-acquisition and performance components are ordinary cognitive processes and mechanisms. Knowledge-acquisition components include three types of cognitive processes:

1. selective encoding that involves determining which elements in a set of information are relevant for one's purposes and which are not;
2. selective comparison that involves putting together relevant elements of information to form an integrated whole and coherent picture; and
3. selective combination that involves finding a relationship between new information and information already stored in one's memory.

Similar to the knowledge-acquisition components, performance components are lower mental processes that intelligent individuals use to implement the instructions given by the metacomponents. They include microcognitive processes such as encoding a stimulus by creating a mental representation of the essential elements of the problem; comparing between two stimuli or parts of a stimulus, applying a previously inferred relation to a new situation, justifying one's response, and physically making the response. How individuals invoke their cognitive knowledge acquisition and performance components can differentiate their intelligent behavior. Those who are able to encode, compare rapidly, and execute performance are deemed more intelligent than others who require more time to carry out the same processes (Aiken 1996).

Sternberg later expanded his component process theory to include two more subtheories. He reformulated the theory as the triarchic theory of intelligence (Sternberg 1988) where the two subtheories embrace the external or environmental aspects of intelligence and extend beyond a purely internal, information-processing model of intelligence. The two subtheories are (1) the experiential subtheory that deals with both external and internal aspects of intelligence. This aspect of intelligence focuses on how the internal components and information processing interact with individual's experience in tackling familiar and novel tasks; and (2) the contextual subtheory that addresses the external aspect of intelligence and strives to go beyond the internal components and elementary processes by focusing on the practical application of these components and processes in real-world contexts.

The information-processing views of intelligence focus on the underlying cognitive functions and processing governing the mental functioning of an individual. As can be seen from the survey above, the cognition processes that govern typical human thought and behavior are numerous, varied, and micro. Some cognitive processes operate at a higher or metacognitive level where strategies are devised and then used to govern ordinary cognitive processes of selective attention, learning, reasoning, problem solving, and decision making. It will therefore appear that when one discusses cognitive perspective of mental functioning of the intellect, both aspects of cognitive function would be needed.

### *Motivation Theories of Intelligence*

The dominant view of intelligence seems to focus on the cognitive aspects of intelligence. However, there exists a small group of researchers in intelligence who believe that intelligence should not merely include cognition but also motivation and interests. In fact, some would argue (for example, Ceci 1996) that without motivation, cognition with its corresponding sets of intelligent behaviors in thought—problem formulation, problem solving, reasoning, or decision making—may not even be activated. Therefore, it is useless to focus simply on cognition and ignore the motivation aspect of intelligence.

Compared to cognitive theories of intelligence, motivation theories of intelligence are not as well formulated. As reported in Sternberg (1986), only three (Baron, Snow, and Zigler) among the twenty-four researchers from the 1986 symposium conceptualized intelligence as including the motivational aspects of mental functioning. Some described motivation in the form of "mental energy," the same phrase Spearman had used to describe the "g" factor, while others conceptualized the motivational aspect of intelligence as mental playfulness.

One contemporary proponent for including a motivational component in the definition of intelligence is Ackerman (1996). In his formulation of a theory on adult intelligence, he believes that noncognitive components such as personality and interests are critical in developing adult intelligence. Ackerman's theory of adult intelligence comprises four components (referred to as PPIK): the intelligence-as-*P*rocess (akin to the cognitive, information processing aspects of intelligence), *P*ersonality, *I*nterests, and intelligence-as-*K*nowledge (akin to Cattell's notion of "*gc*"—the crystallized form of intelligence that is derived primarily from formal education and experience).

Ackerman's formulation of adult intelligence shows that the four components overlap considerably. Abilities in the form of intelligence-as-knowledge, and intelligence-as-process, interests, and personality develop in tandem, such that ability level and personality dispositions influence the probability of success in a particular task domain, whereas interests determine the motivation to attempt the task (Ackerman and Heggestad 1997).

Using Holland's (1959, 1973) hexagonal model of vocational interests and reviewing prior work and his own empirical research, Ackerman (1996; Ackerman and Heggestad 1997) discovered that in adults there are significant positive correlations between

1. realistic interests (that is, people who enjoy activities requiring physical strength, aggressive action, and motor coordination and skill) with intelligence-in-process factors of reasoning, memory span in working memory, math, perceptual speed, and spatial rotation;
2. artistic interests (that is, people who enjoy esthetic activities) with intelligence-as-knowledge (that is, verbal or other crystallized abilities);
3. investigative and intellectual interests (that is, people who enjoy thinking through rather than acting out problems) with both intelligence-as-knowledge and intelligence-as-process factors.

At a more domain-specific knowledge level, Ackerman (2000) found significant correlations between investigative interests and knowledge in science (r = .409), and artistic interests and knowledge in humanities (r = .390). There was also a positive association between Gc and investigative interests (r = .284), and significant positive, but smaller correlations between realistic interests and knowledge. Interestingly, for the other three interests in Hollands's model: social, enterprising, and conventional, they were either not associated with knowledge (Ackerman and Rolfhus 1999), or under some circumstances, negatively correlated with knowledge in science, Gf, and Gc (Ackerman 2000).

Based on consistent findings of strong correlations between interests and intelligences, Ackerman (2000) concluded that interests represent a key component of adult intelligence. Interests determine the motivation—the direction and amount of time expended as an individual undertakes acquiring and maintaining gc or intelligence-as-knowledge—therefore intelligence theories should integrate nonability factors such as motivation and interests into the theory of intelligence, especially in assessing adult intelligence.

## Behavioral Theories or Domains of Intelligence

Unlike the cognitive and motivational theories that emphasize intelligence at the mental-functioning level and focus on what goes on with an individual's internal mental processes, the behavioral theories of intelligence look at a person's action rather than what a person thinks. Behavioral theories tend to emphasize different domains in which the intelligent behaviors are observed and researched. The domains could be categorized broadly into academic versus nonacademic. Academic intelligence refers to behaviors exhibited in school work including subjects such as language, mathematics, natural science, social science, and the arts. Nonacademic intelligence refers to social, emotional, and practical intelligence. No doubt these intelligences may be applicable in the school context, but theories have focused evolving these intelligences more in nonacademic, practical, real-world, work settings.

### *Academic/School Intelligence*

**Measurement of Intelligence—The IQ Test** One of the greatest contributions within the behavioral domain of academic intelligence is the development of a measure of intelligence that can be administered to individuals. The concept of the measurement of intelligence—the IQ (intelligent quotient)—was popularized in the early twentieth century in the academic/school environment. Of all the early scholars who theorized and conducted research on intelligence, Alfred Binet was most prominent and is often accorded the title of "father of intelligence testing" (Aiken 1996). In 1904, Binet was commissioned by the French minister of public instruction to develop a series of diagnostic and instructional procedures to identify children who were unable to learn satisfactorily in the Paris school system. Binet thus focused his measurement of intelligence in the academic domain. His definition of intelligence emphasized judgment, understanding, and reasoning in an academic setting. Together with his co-researcher, Simon, Binet developed the 1905 Binet-Simon scale that comprised a composite of many mental abilities that related to schoolwork. The abilities included memory, reasoning ability, numerical faculty, comprehension, time orientation, object comparison, knowledge, combining ideas into wholes, and others. Binet and Simon later revised the scales in 1908 and in 1911. Ultimately, the scales underwent several translations, revisions, and extensions.

Terman modified and developed many revisions to the scale (1916). He published a preliminary revision of the scale in 1912. In 1916 a modification was published that incorporated the concept of the intelligent quotient (IQ)—the ratio of mental age to chronological age. Later known as the Stanford-Binet Intelligence Scale, Terman's revision of the Binet-Simon Scale served as the standard for intelligence testing throughout the world. The scale was revised in 1937, 1960, and 1986.

The Stanford-Binet Intelligence Scale remained the primary standard of IQ tests for a considerable period of time until Wechsler developed a series of scales that challenged the supremacy of the Stanford-Binet scale. Wechsler originally developed the Wechsler-Bellevue Intelligence scales (WB-I; WB-II) and has since extended the scales to cater for different groups of individuals: the Wechsler Intelligence Scale for Children (WISC); the Wechsler Preschool and Primary Scale of Intelligence (WPPSI); and even a Wechsler Adult Intelligence Scale (WAIS) (Aiken 1996).

One of the primary issues arising from the assessment of intelligence is whether a common core of mental ability—defined as "g," or the general factor, can determine the intelligence of an individual. The central issue that has dominated theoretical development of intelligence is the question of whether it is a single, global ability, or a collection of specialized abilities. Different theorists of intelligence with a psychometric orientation addressed the issue.

**Psychometric Models of Intelligence—Structure of Mental Intellect** The psychometric models of intelligence focus on the structure of intelligence in the form of mental abilities based primarily on the use of factor analytic techniques to discern the number of latent sources, factors, or abilities that characterize differences in individuals. The strategy underlying the psychometric models is to analyze the interrelationships of scores on mental ability tests to discover and infer inductively the underlying structure and relationships among the mental abilities.

Spearman's (1927) theory of general ability is perhaps the earliest, most influential, and most debated psychometric model of intelligence. In essence, the theory states that performance on any cognitive task or mental abilities tests depends on a very important general factor, called "g," plus one or more specific factors ($s_1$, $s_2$, $s_3$,. . . .$s_n$) unique to the particular task. The general factor, g, is regarded as a fixed amount of "mental energy" that an individual assigns to a specific task.

Subsequent research on psychometric models proceeded along two major streams. One stream, the nonhierarchical theories of intelligence, represents a departure from Spearman's notion of a single dominant intelligent factor to multiple dimensions of mental abilities. Thurstone (1938), for example, extracted seven important mental abilities that he labeled: (1) verbal meaning for understanding ideas and word meanings; (2) number for speed and accuracy of performing arithmetical computations; (3) space for the ability to visualize form relationships in three dimensions, as in recognizing figures in different orientations; (4) perceptual speed for the ability to distinguish visual details including similarities and differences between pictured objects quickly; (5) word fluency for the speed in thinking of words, as in making rhymes or in solving anagrams; (6) memory for the ability to memorize words, numbers, letters, and others by role; and (7) inductive reasoning for the ability to derive a rule from given information (Aiken 1996).

Guilford's (1967) structure of intellect model also veered away from the importance of g. Gilford proposed that performance on any cognitive task could best be understood along three dimensions: operation—the kind of mental process performed; content—the type of material on which the mental operation is performed; and product—the output of performing the operation on specific material. The theory of intellect by Guilford identified 120 (4 × 5 × 6) separate factors that are organized along three dimensions: (1) five operation categories—cognition, memory, divergent production, convergent production, and evaluation); (2) four content categories—behavioral, semantic, symbolic, and figural; and six product categories—units, classes, relations, systems, transformations, and implications. Although this initial formulation of group factors was nonhierarchical in nature, Guilford later revised the model to reflect a hierarchical ability model consisting of 150 first-order factors, 85 second-order, and 16 third-order factors, but this has not been empirically validated (Brody 1992; Kelderman, Mellenbergh, and Elshout 1981).

In contrast to nonhierarchical models, all hierarchical models tended toward including g, with g explaining part of the variance in all of the mental ability tests included in the model. Vernon (1971) offered one of the earliest hierarchical models of cognitive abilities. It has four levels. The general cognitive ability, g, sits at the top of the hierarchy, with two major group factors, verbal-education (v:ed) and practical-mechanical-spatial (k:m) at the second level. The v:ed and k:m factors are then broken down further into a number of minor group factors such as verbal and numerical abilities under v:ed, and spatial ability and manual ability under k:m. At the lowest level are factors that are specific to particular tests. Vernon's model attempts to integrate Spearman's g factor with the other nonhierarchical models of intelligence. By viewing g as the highest order factors, and individual mental abilities as narrower factors subordinate to g, the Vernon model combines the idea of Spearman's general intelligence factor while subordinating Thurstone's primary mental abilities or Guilford's factors to subordinate factors under g.

Another hierarchical model of intelligence, called the theory of fluid (*gf*) and crystallized intelligence (*gc*), was developed by Cattell (1943, 1963) and later modified and elaborated by Horn (1986). Cattell originally theorized that general intelligence could be broken into two major components: fluid intelligence and crystallized intelligence. These two forms of general intelligences are assumed to be distinct but correlated. Empirical results show that the two factors are in fact oblique and often correlate in excess of .50 (Brody 2000). Both entail the ability to perceive relationships. In later formulations, three other g factors were added: (1) general visualization (*gv*), involving figural-based problem solving; (2) general memory retrieval (*gr*), involving recognizing and recalling of labels and concepts; and (3) performance speed (*gs*), which relates to quickness in dealing with problems presented in words, numbers, or pictures.

Fluid intelligence is akin to Spearman's notion of g and includes abilities to perceive relationships among stimulus patterns, to comprehend implications, and to draw inferences from relationships. Standardized tests that measure *gf* include analogies, series completions, and other tasks involving abstract reasoning (Davidson and Downing 2000). Crystallized intelligence, by contrast, consists of a set of skills and knowledge that individuals acquire throughout their lifetime. It includes abilities such as verbal comprehension, cognition, and evaluation of semantic relationships. Standardized tests that measure *gc* include vocabulary tests, general knowledge, and verbal comprehension questions.

Cattell initially hypothesized that fluid intelligence is more genetic and biologically determined, whereas crystallized intelligence reflects skills and knowledge acquired through experience in one's lifetime. Both types of intelligences seem to show different patterns of development and decline. Performance on tests that load on fluid intelligence peaks at about age eighteen, whereas those that load on crystallized intelligence continue to improve through most of the adult years (Cattell 1987).

Perhaps the most extensive effort in developing a comprehensive hierarchical model of the structure of intellect lies with Carroll's (1993) three-stratum theory. Carroll derived his theory based on a reanalysis of more than 450 correlation matrices of tests of cognitive abilities that were gathered from studies between 1927 and 1987 and that represented data from more than 130,000 individuals, including people diverse in age, occupation, and measured abilities.

At the apex of the pyramidal model in Stratum III is a conceptual equivalent of Spearman's g, which Carroll perceived not as mental energy, but rather as a general intelligence factor that underlies all intellectual activity and has a high degree of heritability. Below this at Stratum II are eight broad abilities: fluid and crystallized intelligence, learning and memory processes, visual and auditory perception, facile production, and speed. Finally, at the base of the pyramid is a broad spectrum of narrow, specific Stratum I factors.

Psychometric models of intelligence have the longest history in the theoretical development of intelligence. Starting with the general notion of a single factor, g, as indicative of a person's level of intellect, complex models have proliferated to show that g is not unitary and that there may be multiple g's reflecting distinct albeit correlated mental abilities. The recent, more complex hierarchical models tended to build on previous research and integrate seeming disparate findings. There seems to be a general consensus that virtually all measures of cognitive function are positively correlated with each other. Matrices of mental ability measures usually contain a g factor that accounts for about 50 percent of the covariance (Brody 2000).

Despite this consistent empirical finding, there is still a lack of conceptual understanding of exactly what this g factor is. Spearman's original conceptualization of mental energy remains vague. Cattell's idea that intelligence can be subdivided into two components—crystallized and fluid—further proves the point that any single factor may not account for all individual differences in performance on intellectual tasks. Perhaps the most succinct and probing insight about the g factor is given by Horn (1986), who concluded that g is simply a statistical artifact of factor analytic techniques used in the psychometric modeling of intelligence. Until theories and better causal explanations are provided to clarify the source, nature, and concept of g, we are left with an entrenched notion of the presence of a single "g" factor in intelligence without really understanding the meaning of what this "g" represents.

**Academic Domain and Gardner's Research on Multiple Intelligences** Howard Gardner's main contribution to the intelligence research is his proposition that individuals possess differentially varied forms of intelligences (1993, 1999). In his influential and most contemporary work on intelligence from an educational psychology perspective, Gardner makes the case that conceptions, measurements, and tests of intelligent behaviors in the academic environment tended historically to focus too narrowly on linguistic, logical-mathematical, and spatial intelligences (1999). Gardner defines intelligence as the ability to solve problems or to create products that are valued in one or more cultural settings.

Unlike psychometrics researchers on intelligence, where the evidence of multiple intelligences is derived from a mathematical derivative of assessments of different abilities, Gardner argued that the biological and physiological structure of our human brain cognitively predisposes us to different forms of intelligences. He demonstrates that different parts of the brain govern different cognitive abilities. Gardner originally identified seven, but later revised the inventory to eight, forms of intelligence. Further, Gardner argued that these forms of intelligence cannot be measured with a simple metric or traditional intelligence test, nor is it a hierarchical arrangement of mental function such as those proposed by second-order factor analyses (as in the case of Vernon). Rather, Gardner views intelligence as a collection of intelligences, with distinct abilities, each relatively autonomous. Individuals hold different profiles of these multiple intelligences, and the combination of various levels and types of intelligences makes an individual unique in his or her own intelligence. For example, the left cerebral hemisphere governs linguistic intelligence, while the right governs musical, spatial, and interpersonal intelligence.

Linguistic intelligence, the most well-studied human ability, relates to sensitivity to spoken and written language, the ability to acquire and learn languages, and the capacity to use language to accomplish goals. At the cognitive level, there are core information-processing mechanisms associated with this intelligence. These include mechanisms for phonology (speech sounds), syntax (grammar), semantics (meaning), and pragmatics (implications and uses of languages in various settings) (Gardner, Kornhaber, and Wake 1996). Individuals who tend to portray high linguistic intelligence include people whose profession demands a good command of language use—lawyers, journalists, advertising copywriters, speakers, writers, and poets.

Logical-mathematical intelligence relates to analyzing problems analytically and to the ability to conduct abstract reasoning, carry out mathematical operations, and detect abstract links and relationships even in the absence of realistic or concrete objects. Individuals who tend to portray high logical-mathematical intelligence include mathematicians, computer programmers, financial analysts, accountants, engineers, and scientists.

Spatial intelligence refers to the potential of individuals to perceive visual or spatial information, to transform and modify this information and to recreate visual mental images even without a specific reference to an original physical stimulus. They have the ability to recognize, manipulate, and navigate in patterns of large open spaces (for example, airspace), as well as the patterns of more confined space (rooms, buildings). They also possess the ability to construct images in three dimensions and to move and rotate these representations.

The above three forms of intelligences represent those traditionally measured by conventional intelligence tests. Gardner suggests other forms of intelligences that researchers have ignored: two forms of intelligence that relate to the arts, musical and bodily-kinesthetic; two that relate to managing the self and others, intrapersonal and interpersonal intelligences; and intelligences that relate to nature, spiritualism or existentialism, and morality (H. Gardner 1999).

Within the domain of the arts, musical intelligence refers to the ability of people to create, communicate, and understand meanings made out of sound (Gardner, Kornhaber, and Wake 1996). It will involve the skill in performing, composing, and appreciating musical rhythms and patterns. Individuals who portray high musical intelligence include composers, conductors, instrumentalists, as well as acousticians and audio engineers.

Bodily-kinesthetic intelligence refers to the ability of an individual to use his or her whole body or parts of the body to solve problems or fashion products. There are people whom are extremely dexterous in their motor-actions as well as their ability to manipulate external objects. The case for bodily-kinesthetic intelligence is supported by apraxias—a neurological syndrome related to left-brain hemisphere damage. People with apraxias are unable to perform sequences of movements although they understand a request and know exactly what sequences of actions to perform. Examples of individuals who exhibit high bodily-kinesthetic intelligence include athletes, dancers, gymnasts, mechanics, surgeons, and craftspersons.

The two forms of intelligences on managing self and others are akin to the nonacademic intelligences of social and practical intelligences. As for the newer forms of intelligences—naturalist, spiritual, and moral—they are new and have not been subjected to sufficient scientific scrutiny to establish their validity. Nonetheless, naturalist intelligence refers to an individual's ability to recognize and classify numerous species of the flora and fauna of an individual's environment (for example, ornithologists, environmentalists). Spiritual or existential intelligence refers to one's ability to ask ultimate questions about God, the meaning of life, and to experience the connections among individuals on earth, and the relationships between individuals and the world (Wolman 2001). Moral intelligence refers to the ability to develop one's character by mastering the value system of an individual's culture and adhering to the value system. Gardner speculates that the moral form of intelligence is closely related to spiritual/existential intelligence as spiritual concerns often focus on moral issues, as well as emotional intelligence where an individual ability to know, control, and monitor his or her emotions, as well as his or her own aptitude toward showing respect, empathy, and consideration within a certain moral or value framework promotes a more harmonious functioning of the family, work environment, and social community (H. Gardner 1999).

### *Nonacademic Intelligences*

Theorists and researchers have discovered that intelligent behavior in an academic or school setting does not necessarily translate to intelligent behavior in a real-world work setting, or in daily social interactions and community living. As a result, these other forms of intelligences have since been classified as nonacademic (Sternberg 1997) to reflect intelligences that are associated with more intelligent adaptive behaviors required of the real world than simply in school settings.

**Social Intelligence** Thorndike was one of the earliest researchers to distinguish academic from nonacademic intelligences. In 1920, he proposed the notion of social intelligence. He distinguished social intelligence from two other forms of human intelligences—abstract and mechanical—and defined social intelligence as the ability to understand and manage people and to act wisely in human relations (Thorndike 1936; Thorndike and Stein 1937). Since then, the concept of social intelligence has evolved into a wide variety of possible meanings (Keating 1978).

Walker and Foley (1973) showed that using a psychometric approach where social intelligence is conceptualized in terms of individual differences in human abilities, social intelligence can be defined in one of three approaches. First, social intelligence is defined as the ability to react cognitively to an interpersonal stimulus. Based on this narrower formulation, social intelligence is defined simply as a cognitive appreciation of others without necessary action on the part of the perceiver. In this narrow perspective, social intelligence is exemplified by skills such as the ability to read nonverbal cues, or to make accurate social inferences. Role taking, person perception, social insight, and interpersonal awareness are exemplary constructs representing social intelligence.

Second, social intelligence is defined in terms of behavioral outcomes. Social intelligence is conceived as the effectiveness or adaptiveness of one's social performances. It focuses not so much on the cognitive recognition or appraisal of interpersonal situations, as on the action-oriented coping with others. Ford and Tisak (1983) adopt this definition of social intelligence, arguing that using a behavioral effectiveness criterion to define social intelligence is consistent with the conceptualization of intelligence as one's adaptation to one's environment (Piaget 1972). Accordingly, Ford and Tisak (1983) adopted Hogan's empathy scales (1968) together with peer and teacher ratings of social competence to assess social intelligence.

Third, social intelligence is defined to include both the cognitive and behavioral orientations of the first two approaches. For example, Marlowe (1986) adopts the wider definition and views social intelligence as the ability to understand the feelings, thoughts, and behaviors of persons, including oneself, in interpersonal situations and to act appropriately on that understanding. He also equates social intelligence with social competence and conceptualizes social intelligences as composing a set of problem-solving skills that enable the individual to find and/or resolve interpersonal problems and to create useful social products (Marlowe 1986). Marlowe's model comprises four domains: social interest (concern for others); social self-efficacy (self-confidence in knowing how to react in social interactions); empathy skills (ability to cognitively and affectively understand another); and social performance skills (observable social behaviors).

Similarly, Riggio (1986; Riggio, Maessamer, and Throckmorton 1991) proposed a model of social intelligence that views basic communication social skills as the building blocks that make up social competence. These basic skills comprise both cognitive skills and behavioral repertoire: expressivity—skills in encoding verbal and nonverbal messages and the ability to engage others in social interaction; sensitivity—skills in decoding verbal and nonverbal messages and also related to understanding social norms and roles; and control—skill in social self-presentation, social role playing, and regulating emotional and nonverbal displays.

One of the challenges associated with the psychometric approach in the study of social intelligence is the difficulty in demonstrating sufficient discriminant validity of social intelligence from traditional academic measures of intelligence. Significant positive correlations exist between social intelligence and linguistic intelligence or verbal ability given that social events rely heavily on a person's ability to communicate verbally. Research using cognitively oriented measures, such as measures of social judgment and social insight, also correlated highly with the traditional cognitive ability tests. Using nonverbal measures of social perceptions, research in social intelligence has been more successful in distinguishing social from traditional academic intelligence.

Rather than using the psychometric approach of developing ability batteries to assess individual differences in social intelligence, Cantor and her colleagues (Cantor and Harlow 1994) adopted a knowledge-based approach that assesses a person's level of declarative and procedural knowledge in social intelligence. According to Cantor, Kihlstrom, and their colleagues, social intelligence therefore comprises the repertoire of declarative and procedural knowledge that individuals use to solve problems in their social lives (Kihlstrom and Cantor 2000). Declarative knowledge consists of abstract social concepts and memory for specific social events while procedural knowledge comprises rules, skills, and strategies for applying social knowledge.

To study the type, range, and depth of social knowledge, Cantor and her colleagues examine various life tasks that have a social dimension—including daily living events such as making friends, finding a spouse, or serving in a community. Studying these social life events and the corresponding strategies individuals employed in pursuing goals related to these events provides insight about the cognitive strategies and behaviors that are indicative of social intelligence. Results of the knowledge-based approach showed that socially intelligent individuals are more mindful of their social interactions. They consciously develop action plans, monitor their actions, and evaluate the outcomes of their actions. Socially intelligent individuals also tend to be more flexible in their life task pursuits, altering their plans to the feedback they receive or in response to newly perceived social demands emerging from self, others, or the changing contexts (Kihlstrom and Cantor 2000).

**Emotional Intelligence** Emotional intelligence refers to the ability to monitor one's own and others' emotions, to discriminate among them, and to use the information to guide one's thinking and actions (Salovey and Mayer 1990). In recent years, the concept of emotional intelligence has received increasing attention as a result of Goleman's thesis in *Emotional Intelligence* in 1995. In addition to Goleman, other researchers have developed models and tests of emotional intelligence that focus on different nuances of the construct.

Mayer, Salovey, and Caruso (2000) offer one of the most comprehensive reviews of the work on emotional intelligence to date. In their review, they classified models of emotional intelligence into two categories: one is a mix of mental abilities and personality dispositions; the other is conceptualized as purely based on mental abilities. Goleman's and Bar-On's models embrace both mental abilities and personality dispositions while Mayer and Salovey (1997) and Davies, Stankov, and Roberts (1998) contend that the models must reflect only mental abilities and not embrace personality constructs.

According to Goleman (1995), to demonstrate emotional intelligence, one requires two processes. First, a person must be able to respond to the instantaneous arousal from an external stimulus; second, this person within a short period of "reflection" time must assess the meaning and quality of his or her emotional response and act on that understanding in an adaptive fashion. The major areas of skill a person with emotional intelligence possesses include knowing one's emotions, such as knowing a feeling as it occurs; managing emotions, such as the ability to soothe oneself; motivating oneself, such as delaying gratification; recognizing emotions in others, such as empathetic awareness; and handling relationships, such as skills in managing emotions in others (Mayer et al. 2000).

As for Bar-On (2000), emotional intelligence is conceptualized as a set of noncognitive capabilities, competences, and skills that influence one's ability to succeed in coping with environmental demands and pressures. Major areas of skill a person with emotional intelligence exhibits include intrapersonal skills such as emotional self-awareness; interpersonal skills such as empathy; adaptability such as flexibility; stress management such as stress tolerance and impulse control; and general mood such as happiness and optimism. Both Goleman and Bar-On's conceptualization of emotional intelligence overlaps with social intelligence since both deal with handling interpersonal relationships.

In Mayer and Salovey (1997) the conceptualization of emotional intelligence narrows from an all-encompassing model to focusing specifically on emotions and their interaction with cognition. Mayer, Salovey, and their associates developed a test called the Multifactor Emotional Intelligences Scale tests (MEIS) that comprise twelve ability scales classified into four categories of ability (Mayer, Salovey, and Caruso 1997). Emotional intelligence is defined as a set of the four abilities an individual possesses that allows the individual to (1) perceive and express emotion, (2) assimilate emotion in thought, (3) understand and reason with emotion, and (4) regulate emotion in self and others.

Davies and colleagues' (1998) formulation of emotional intelligence also focuses narrowly on emotion and its relation to cognition and information processing and does not include personality characteristics. They define emotional intelligence as a set of four conceptually related psychological processes involving the processing of affective information. The processes are (1) the appraisal and expression of emotion in self; (2) the appraisal and expression of emotion in others; (3) the regulation of emotion in the self and others; and (4) the use of emotion to facilitate performance.

In the appraisal and expression of emotion of the self, individuals are deemed to be aware both of their mood and of their thoughts concerning that mood (Mayer and Stevens 1994; Swinkels and Giuliano 1995). There are currently three major streams of research that are related to the self-appraisal and expression of emotion. The first relates to research on alexithymia, an abnormal psychiatric condition in which people are unable to evaluate or express their emotions. The Toronto Alexithymia Scale is a key indicator of this clinical disorder (Bagby, Parker, and Taylor 1994). The scale assesses three dimensions of alexithymia: (1) the difficulty in identifying feelings; (2) the difficulty in describing feelings; and (3) externally oriented thinking. The second is the Trait Meta-Mood scale originated from Salovey, Mayer, Goldman, Turvey, and Palfai (1995). The instrument focuses on the self-reflective aspect of mood experiences. Included in the scale are subscale concepts of attention and clarity that measure the degree to which individuals notice their feelings and the ability to understand these feelings respectively. The third stream of research focuses on self-expression of emotions. Nonverbal expressiveness as measured by the Affective Communication Test (Friedman, Prince, Riggio, and DiMatteo 1980) has been proposed as a valid measure of this component of the emotional intelligence construct. It is a self-report inventory that assesses the degree to which individuals are able to express themselves nonverbally in a variety of situations.

In the psychological processes of appraising and recognizing emotions of others, research has shown that the appraisal of one's own feelings and emotions and appraisal of the feelings of others are highly correlated. Individuals with high levels of self-awareness and perception of their own emotions are able to detect and assess emotions of others more highly. For example, individuals who score high in the Toronto Alexithymia Scale are less able to recognize facial expressions of emotions in others. In another study, both self-emotional appraisal (ability to accurately identify another's emotions) and expression (ability to reexperience these emotions oneself) are also related to the personality characteristic of empathy (Salovey and Mayer 1990). Empathy involves both one's ability to identify with the feelings of others and to have general access to one's own feeling states. In fact, Alxithymics have been shown to possess reduced emotional empathy because they tend to be as confused about the feelings of others as they are about their own emotions (Mayer, Salovey, Gomberg-Kaufman, and Blainey 1991).

The third psychological process focuses on regulation of one's own emotions. This process relates to the metaexperience of evaluating and proactively acting to change one's mood. The subscale of Repair in the Trait Meta-Mood Scale (Salovey, Mayer et al. 1995) refers to the degree to which individuals are able to moderate their own mood states. This emotion regulation concerns attempts to repair unpleasant moods while maintaining pleasant tones. Regulation of emotion also includes the ability to alter the affective reactions of others (for example, the ability to calm an angry coworker or to pacify other individuals in distress).

The fourth and final psychological process involves the use of emotions to facilitate performance. Goleman's (1995) dimensions of emotional self-control and delay of gratification that support human accomplishment are examples of processes that fall under this category. To date, there are relatively fewer proposed measures of this aspect of emotional intelligence. A potential key instrument that measures this aspect of emotional intelligence is Roger and Najarian's (1989) Emotional Control Questionnaire. The questionnaire comprises four scales reflecting how an individual is able to control one's emotion under difficult or trying conditions: aggression control, rehearsal, benign control, and emotional inhibition.

**Practical Intelligence** The concept of practical intelligence evolved from the observation that individuals who possess superior academic abilities and who perform well in schools may not necessarily adapt well in real-world settings respectively. Neisser (1976) reasoned that individuals who perform well in academic settings may not necessarily thrive in real-world settings because the problems faced in academic settings are very different from those of the real world. In school, students are often required to solve problems that are (1) well defined, (2) already formulated by others, (3) come complete in the information required to solve the problem, typically only has one correct answer, and one correct method of getting the right answer, and (4) are simplified so that they are out of the context of the ordinary experiences of similar problems in the real world.

In contrast, the practical, everyday problems faced by individuals in nonacademic settings tend to be unformulated, or in need of formulation, or reframing. Individuals work with incomplete information and have to deal with dilemmas of multiple correct solutions, all only satisfying at best, with none necessarily optimal. Practical problems are also characterized by their many different ways of arriving at these solutions. For example, Frederiksen (1986) used in-basket tasks in the domain of business management to simulate the real-world practical problems faced by managers. He found that effective performance on the in-basket task depended first on the ability to generate numerous relevant ideas and options to the tasks, or what he terms, "ideational fluency," and second, on the amount of domain knowledge of the particular problems handled in the in-basket (Wagner 2000).

Practical intelligence is therefore seen as the ability to solve practical problems as opposed to academic problems. Sternberg defines practical intelligence formally as the ability of an individual to accomplish personally valued goals by adapting to the environment, shaping or changing the environment, or selecting a new environment (Sternberg 1985, 1997). It encompasses broadly the ability of one to succeed in everyday life, including managing one's jobs, or one's career, in managing self and in managing others (Wagner and Sternberg 1985). In laymen's language, Sternberg characterizes practical intelligence as "street smarts" or "common sense" in contrast with "school smart" or "book smarts" in academic intelligence (Wagner and Sternberg 1990; Hedlund and Sternberg 2000).

Research in practical intelligence shows that individuals with high practical intelligence possess superior practical, rather than academic problem-solving, abilities and higher levels of practical, tacit knowledge. An elegant demonstration of the differences between academic versus practical problem-solving ability was conducted by Ceci and Liker (1986), who found expert racetrack handicappers who use highly complex mathematical algorithms to predict racing speeds of race horses showed no relation to their math achievement IQ. In turn, these expert racetrack handicappers are unable to perform better than chance in stock market tasks, although stock market prediction tasks were structured similarly to the racetrack problem (Ceci and Ruiz 1991). Other studies showed that everyday tasks such as price-comparison shopping was not related to traditional math achievement tasks (Murtaugh 1985).

To understand why a person can solve practical problems better, researchers have begun to probe deeper into the internal mechanisms of the development of practical intelligence. One stream of research focuses on the unique problem-solving process required for developing practical intelligence over time. Research has identified key dimensions that differentiate the problem-solving process required for solving practical as opposed to academic tasks. The dimension includes the context of practical problem solving; the content and goals of practical problem solving; the problem definition and formulation in practical problem solving; and strategies used in solving practical problems (Sternberg and Grigorenko 2000).

Another stream of research focuses more on knowledge required for practical intelligence, specifically the concept of tacit knowledge that is deemed the key success factor in any practical problem domain (Wagner and Sternberg 1985; Wagner 1987).

Two characteristics of the context of practical problem solving appear to have significant impacts on the degree of development of practical abilities: complexity and familiarity. The extent to which work conditions become more cognitively complex as requiring greater independent thought, judgment, and creative flexibility, the greater the gains in an individual's intellectual performance over time. Moreover, the more familiar a person is to the task, the higher the performance on the tasks.

As for the content and goals of problem solving, Berg and colleagues (Berg 1989; Sansone and Berg 1993) found that the nature of the practical problems facing an individual varies considerably throughout a person's life; therefore, goals associated with one set of practical problems at one stage of a person's lifetime do not necessarily remain the same at a different stage of life development. Five and six year olds focus on relationships with family members (parents, siblings); eleven and twelve year olds focus on school and after-school problems; college students focus on succeeding academically, romantic relationships, social networks, and developing a separate identity; adults focus on career and starting a family; older adults focus on family and health.

Research on practical problem-solving strategies showed that people adopt a wide range of problem-solving strategies available to individuals, from proactive strategies of problem-focused action and cognitive problem analysis, to reactive strategies of passive-dependent behavior and avoidant thinking and denial (Cornelius and Caspi 1987). The empirical research shows that more experience in problem solving in a specific practical domain does not necessarily equate to evoking better problem-solving strategies and therefore effect better outcome. Much appears to depend on the extent individuals learn to become increasingly capable of modifying their problem-solving strategies to fit carefully to the specific demands of the problem at hand, and even whether the individuals are able to avoid getting into everyday problems in the first place (Berg 1989).

Finally, a dimension that links the content and goals of problem solving and strategies used in solving the problem is the extent to which an individual is able to define and formulate a problem appropriately. For example, Berg and her colleagues (Berg, Calderone, Sansone, Strough, and Weir 1998) showed that if individuals frame problems as task oriented, then they will tend to use strategies that reflect independent and logical action; whereas problems framed as interpersonal are more likely to evoke strategies that involve regulating or including others.

The stream of research that focuses on the concept of tacit knowledge in practical intelligence is undertaken by Sternberg and his colleagues, who examined tacit knowledge in different practical domains facing business managers, college professors, salespeople, schoolteachers, college students, military leaders, and others (Sternberg, Wagner, Williams, and Horvath 1995; Sternberg, Wagner, and Okagaki 1993; Wagner and Sternberg 1985, 1986; Wagner 1987).

According to Sternberg and his associates, tacit knowledge refers to knowledge that is acquired from everyday experience that tends to remain implicit and unarticulated. Tacit knowledge is procedural in nature: it is knowing how to act in particular situations, and therefore it is practically oriented. Tacit knowledge is therefore the implicit "rules of thumb" kind of knowledge gained from experience performing practical everyday performance (Wagner and Sternberg 1990; Sternberg et al. 1995).

Because it is more difficult to articulate, tacit knowledge is measured in the responses individuals provide to practical situations or problems, and the responses are scored based on the individual's responses compared to an expert group, to the degree the responses conform to professional rules of thumb. Empirical results that link tacit knowledge to performance showed that tacit knowledge tests predict performance over and above g, indicating that practical intelligence, as measured with tacit knowledge tests, does discriminate from general intelligence and is a significant predictor on performance across a number of occupations (Hedlund and Sternberg 2000; Sternberg et al. 2000).

## Contextual, or Environmental, Theories of Intelligence

Biological, cognitive, motivational, and behavioral aspects of intelligences assume that the locus of intelligence resides within an individual and ignore the potential environmental or contextual influences on intelligence (Sternberg 1990). For proponents of context, or environmental, theories of intelligence, intelligence is assumed to be defined by the culture or the environment. According to the contextual theories of intelligence, what is defined, conceptualized, or regarded as intelligence or intelligent behavior in one context or culture is not universal. Therefore, rather than focusing on biological, mental, or behavioral functioning of an individual, contextual theorists of intelligence believe that intelligence research should focus on understanding the ecological context, that is, the cultural environment in which a person lives to survey the values of a particular society (Berry 1974; Berry and Irvine 1986).

Evidence that culture determines intelligence comes from cross-cultural research that focuses on the philosophical underpinning as well as the operational definitions of intelligence. Sternberg and Kaufman (1998) reviewed cross-cultural views of intelligence and showed that while there are some etic, or universal, views on intelligence, intelligence can also be culturally specific. Comparing Western and Eastern cultures, Yang and Sternberg (cited in Sternberg and Kaufman 1998) showed that in the West, an intelligent person is one who devotes him- or herself to learning and persists in lifelong learning as an intrinsic goal. In the East, an intelligent person is one who is benevolent, humble, has full knowledge of oneself and external conditions, and does what is right.

Sternberg and Kaufman (1998) also reported on his studies into people's implicit theories of intelligence between Chinese and the United States. For the Chinese, intelligence is deemed to comprise five factors: (1) a general cognitive factor akin to the Westerner's notion of the 'g' factor; (2) interpersonal intelligence; (3) intrapersonal intelligence; (4) intellectual self-assertion; and (5) intellectual self-effacement. In contrast, American's implicit theories of intelligence are comprised of (1) practical problem solving, (2) verbal ability, and (3) social competence.

In India and Eastern cultures other than the Chinese, the notion of intelligence is tied to Buddhist and Hindu philosophies; thus intellectual elements of waking up, noticing, recognizing, understanding, and comprehending are deemed essential ingredients of intelligence. In addition, motivational elements such as determination, mental effort, feelings, and opinions are also embraced as intelligence (Das 1994).

Comparative studies on intelligence in the continent of Africa with the United States also revealed fascinating emic perspectives of culture. For example, silence in Western schools is interpreted as a lack of knowledge, whereas in the Wolof tribe in Africa, silence is characteristic of people of higher social class and distinction (Irvine 1978). Chewa adults in Zambia focus on social responsibilities, cooperation, and obedience as important dimensions of intelligence (Serpell 1974, 2000), while Kenyans emphasize responsible participation in family and social life (Super and Harkness 1982).

In a more systematic theorizing on the differences between cultures, Ruzgis and Grigorenko (1994) drew on the cultural dimension of individualism and collectivism with its corresponding independent versus interdependent self-concepts to explain why Asian and African conceptualizations of intelligence differ from those of the West (Markus and Kitayama 1991). Given that countries in Asia, Africa, and even Latin America gravitate toward being more collectivistic than the Western cultures of the United States, Europe, Canada, and Australia, which tend to be more individualistic, the kinds of intelligences that are prized in these cultures fit and reflect their underlying individualism-collectivism orientation. Asians and

Africans highly value social intelligence—the preservation of harmony and the socioaffective component of relationships, whereas Westerners value cognitive intelligence as independent achievement that is directed toward self and individual goals. In terms of values, the West emphasizes mastery and task competence, while the East focuses on maintaining social harmony and stability in intergroup relations.

### The Interactional (Individual × Contextual) Theories of Intelligence

A third perspective on intelligence is the interactional theories of intelligence. The interactional perspective represents the most comprehensive view of intelligence. It defines intelligence as an interaction between the individual and his or her context. As Sternberg observed, "people do not think or behave intelligently within a vacuum nor can culture or society set standards for what constitutes intelligence without reference to the functions people perform in that culture or society" (1990, 42). The interactional models of intelligence embrace both internal and external aspects to ensure that intelligence is modeled dynamically to adjust to changes in environmental or contextual conditions.

To date, three models of intelligence have been identified as embracing an interactional orientation of intelligence: Gardner's theory of multiple intelligence; Sternberg's triarchic model of intelligence; and Ceci's bioecological model (Davidson and Downing 2000). Although Gardner's theory of multiple intelligences focuses on behaviors, his theory of multiple intelligences is generally regarded as an interaction model of the individual and the environment. Gardner believes that individuals possess multiple innate potential abilities, and different individuals possess differential endowments of these abilities, yet the differential endowments are developed either through internal biological predispositions such as genetic inheritance, or are fostered by *external* contexts such as training, socialization, acculturation, and opportunities provided by one's environment. Therefore, the theory of multiple intelligences is classified as one that focuses on the interaction of individual and environmental foci of intelligence.

A more elaborate theory of intelligence that views intelligence as a function of both internal and external factors is Sternberg's (1988) triarchic theory of intelligence. The theory actually comprises three subtheories: internal, external, and experiential aspects of intelligence. The internal subtheory is Sternberg's components process theory (Sternberg 1977, 1985). Briefly, this subtheory addresses the internal aspect of intelligence, focusing on the three classes of components and mental information-processing mechanisms that constitute intelligence and drive intelligent thought and behavior: metacognitive, knowledge-acquisition, and performance components.

The external subtheory that Sternberg coined as the "the contextual aspect of intelligence," refers to "practical intelligence" as observed in nonacademic forms of intelligence. Practical intelligence recognizes people's adaptation to their environments. Again, briefly, practical intelligence represents whatever skills and knowledge an individual possesses for adapting to and reshaping environments, or even selecting new environments where they may thrive. A key component of practical intelligence is tacit knowledge—knowledge about the social environment that is never explicitly taught and may never even be verbalized (Wagner and Sternberg 1986). It is also conceptualized as knowledge involved in solving personally meaningful, but often ill-defined problems. Practical, social, emotional, interpersonal, and intrapersonal intelligences share many similarities and are not commonly referred to as "nonacademic" intelligences (Jones and Day 1997) to distinguish them from the traditional forms of intelligences that are frequently tested in school settings.

The experiential subtheory of intelligence captures people's ability to cope with novel situations in two ways: (1) insight into the situation, and (2) efficient automatization to deal with it better when it recurs. It embraces important aspects of insights and creativity. Experiential intelligence represents skills and knowledge needed to orient oneself to and automatize novelty. These skills and knowledge will include a number of cognitive processes required of the individual in (1) selective encoding—that is, assimilating whatever information is in the situation that is relevant, (2) selective comparison—interrelating information with relevant information from memory, (3) selective combination—combining all sources of information into a meaningful whole; and finally (4) automatization that represents the compilation of all previous knowledge.

In sum, Sternberg's triarchic model of intelligence emphasized both the internal and the contextual dimensions of intelligence. First, the model stressed the importance of examining intelligence in relation to practical daily environments beyond the academic environment. Second, the model focuses on the internal, mental aspect of intelligence by elaborating on a set of key cognitive processes required of an individual in adapting to his or her environment. He believes that although the internal, external, and experiential aspects of intelligence interact and work together, not everyone is necessarily strong in all three aspects. Intelligent behavior therefore consists of purposely adapting to, selecting, and shaping one's environment, and that both cultural and environmental contexts and an individual's cognitive abilities define one's level of intelligence.

The third interactional model of intelligence is Ceci's (1996) bioecological theory of intelligence. Ceci theorized intelligence as an interaction of three components: (1) a person's internal innate abilities; (2) the environmental context; (3) and the person's internal motivation. Like Gardner, Ceci believes that a normal person is born with biologically based innate cognitive potentials. These biological potentials are then converted or realized into real cognitive abilities depending on the extent to which the individual is nurtured and fostered by the challenges and opportunities afforded by the environment.

In Ceci's view, individual differences in intelligence are therefore largely determined by the context—the environmental resources (for example, range and depth of learning opportunities in the form of stimulating interactions, experiences, and books) that influence the development of an individual's innate cognitive potential (Davidson and Downing 2000). Ceci also recognized the importance of motivation in determining one's level of intelligence. According to the bioecological model, individuals must be motivated to capitalize on their innate abilities and to take advantage of their particular environments. According to the model, motivation is a key ingredient of intelligence because differential efforts lead to uneven intellectual performance among individuals, even if individuals are endowed similarly in innate abilities and placed in environments of similar challenges and opportunities.

## CONCLUSION

For many decades, the field of intelligence research has focused on "g" as the primary factor that measures a person's intelligence. That intelligence equals "g" is too simplistic. The concept of "g" focuses only on a very restricted view of an intraindividual perspective of intelligence. Specifically, it emphasizes only an individual's cognitive ability (linguistic, logical-mathematical, and spatial) performed on a restricted set of abstract, academic tasks.

Intelligence is a wider and far more exciting concept than "g." First, intelligence can be modeled and conceptualized intraindividually at the biological level of analysis. The recent advances in medical technology in neuropsychology and psychophysiology promise that future research can demonstrate a closer link between the mechanisms of the brain with the intelligence of the mind.

Second, intelligence is seen to embrace motivational mental functioning, and not just cognition. It is useless to think of an intelligent individual simply from a cognitive perspective, since cognition without motivation means no mental energy is directed toward any thought, emotion, or behaviors, intelligence or otherwise.

Third, intelligent behaviors span beyond being successful in academic tasks that require verbal, spatial ability, or logical, abstract reasoning. Intelligence is required in work and social settings, in family and community living, and these nonacademic environments demand intelligences in artistic, social, emotional, and practical forms.

Fourth, intelligence can also be modeled and conceptualized from an external, contextual, or environmental perspective. From the cultural psychology school of thought on intelligence, environment and cultural values of a society dictate the norms of intelligences and what intelligent behaviors mean. The concept has been shown to reflect both etic and emic dimensions such that intelligence means different things in different cultures.

Fifth, the most complex formulation of intelligence is one that spans both an internal and external perspective of intelligence. These models reflect the need to integrate both perspectives so as to ensure that intelligence is broad enough to reflect its full complexity. Gardner's theory of multiple intelligences, Sternberg's theory of triarchic intelligences, and Ceci's bioecologcal theory of intelligence are exemplars of models that build on and integrate subfields of intelligences: biological, molar mental function, psychometric, behavioral, and contextual approaches.

Our conceptualization of cultural intelligence is also a concept where the locus of intelligence is positioned at the interaction between the individual and the environment. We define cultural intelligence as "a person's capability to adapt effectively to new cultural contexts." From an internal or intraindividual perspective of intelligence, we see the core of cultural intelligence as comprising the molar mental functioning of metacognition and cognition and motivation, and the behavioral level of everyday living. However, because cultural intelligence focuses on a person's ability to adapt to *new cultural contexts*, we also ascribe importance to the context or environment on cultural intelligence. Therefore, we see cultural intelligence as a concept that spans internal and external views such that cultural intelligence is not determined by a person's intelligent cognition, motivation, and behavior alone, but also includes a person's mental intellect and behaviors as it relates to his or her functioning and adaptation in new or multiple cultural environments.

# 3 A THEORY OF CULTURAL INTELLIGENCE

In this chapter we focus on the core elements of our theoretical framework used to describe cultural intelligence. There are many reasons why we propose to develop such a concept, ranging from the theoretical extension of facet models of intelligence to a practical justification based on the globalization in the workplace. Our desire to develop and present cultural intelligence reflects a view from many different fields (for example, psychological, sociological, and anthropological). The need to understand why some people are more adept at adjusting to new cultural surroundings than others is sufficient justification to explore a new theory of cultural intelligence. With the popularity of such concepts as emotional intelligence, personal intelligence, social intelligence, and so forth, our effort would be woefully incomplete if we did not explore the difficulties one has in adjusting to new cultural contexts. This adaptation requires skills and capabilities quite different from those used by a person within his or her own cultural context. Three general components capture these skills and capabilities: cognitive, motivational, and behavioral. Without all three of these facets acting in concert, a person does not display cultural intelligence.

Cultural intelligence refers to *a person's capability to adapt effectively to new cultural contexts.* This definition is not at all at odds with existing definitions of general or cognitive intelligence. For example, Sternberg and colleagues (2000) briefly trace the history of intelligence theory back to the late nineteenth century (to such theorists as Galton and Cattell) and describe a common feature of intelligence as the ability to adapt and adjust to one's environment. Work on modern conceptualizations of intelligence (for example, Cantor and Kihlstrom 1985; H. Gardner 1998;

Mayer and Salovey 1995; Sternberg 1985, 1997) suggests three core dimensions of intelligence including direction (knowing what is to be done), adaptation (customizing, implementing, and monitoring a strategy for a given task), and criticism (critiquing one's own approach). There are several important features of this definition. First, it describes self-regulatory processes of acting, reacting, and monitoring action. Second, it incorporates an evaluative component (self-criticism) that we believe is critical as well. Finally, it captures an action implementation element.

The features of our definition require clarification and definition. For the moment, an example should suffice to illustrate the various complexities faced by a cross-cultural sojourner. An American professor ventures to London where he teaches an executive MBA course at a prestigious British business school. Throughout the semester he notices that his British students are attentive and interactive but consistently polite and respectful of his authority in the classroom. Further, the students demonstrate a general level of restraint with a bit of sardonic humor as they deal with one another. At the end of the term, the professor mistakenly issues grades using the American grading system of points (90–100 A, 80–89 B, and so on) instead of the British system (75–above Distinction, 64–74 Merit, and so on). After several weeks, one of his students calls to ask about the problem with the grades. The professor, unaware that such a problem exists, listens as the student describes the problem with the incompatible grading schemes and demands to know when the professor will correct things. The professor replies that he is sorry for the inconvenience it might have caused and reassures the student that it will be corrected but adds somewhat glibly, "I hadn't realized that there was a problem—anyway, you managers don't care about your grades . . . do you?" At this point, the student's tone changes from one of general civility to extreme rancor and abuse, including yelling at his professor and accusing him of incompetence, stupidity, and irresponsibility. The conversation ends as the student's abuse continues to the point that the professor hangs up the phone on the student. In thinking about the incident, the professor is baffled by the extreme lack of decorum, rudeness, aggressiveness, and abruptness of the student. He decides to ask a British colleague why something such as this might have happened; the colleague says that many British people are so used to being restrained in their manner that "when the top blows off, the mountain comes down." (Apparently, the American's glib comment concerning grades was a catalyst for such an eruption.) Later that week the American professor notices a similar escalation of events while riding the underground rail system with a woman who lost all composure and yelled at a patron because he failed to give up his seat to her eight-year-old son. The American professor notices the parallel of events from his student to this train rider.

Why did the professor fail in his interaction with his British student? This professor is well regarded by his American colleagues as a "people person" who is very understanding and empathetic of others. However, he failed to realize that his executive student was extremely angry and he provided the final impetus for the student's venting of anger. Although it is likely that the American has good social intelligence and/or emotional intelligence (H. Gardner 1998), it is clear that this intelligence is not realized in a cross-cultural context.

We can see why the professor failed in this situation if we analyze this minicase study. There are three general categories of problems limiting the effectiveness of the professor's interaction with the student. First, he failed to comprehend the intensity and direction of the student's feelings. He wrongly assumed that the student was relying on the sardonic humor he had observed earlier among the British students. Second, he was not sufficiently motivated to deal with the student sincerely and instead relied on glib and superficial comments. Third, he was not able to use a sardonic verbal and interpersonal style that resonated well with the student. His behavioral reaction was one of anger and isolation by hanging up on his student. Through subsequent interactions with other British colleagues he attempted to understand cognitively what had transpired in the telephone conversation. It remains unclear whether his motivational state had changed since the incident or if he would, in the future, be able to enact an appropriate behavioral style for this type of encounter.

Why wasn't the American professor able to transfer his social intelligence across national boundaries and predict the actions (and reactions) of his British student? Our argument is that very different skills for adaptation are needed across cultural borders since familiar references are absent. That is, a person with high cognitive or social intelligence is able to understand and react appropriately to another person because her cultural context is familiar. Relative predictability and uniformity of action is expected and used in formulating responses. However, in a new cultural setting cues are largely or entirely absent (or present but misguided), so a common attributional and perceptual frame cannot be relied on. In this case, a person must develop a common frame of understanding from available information even though he or she may not have an adequate understanding of local practices and norms.

The establishment of a common metric for sense making is important for cultural intelligence. We are not arguing that someone who is culturally intelligent is only learning the ways that people act and behave in a new culture. Although this cognitive activity does take place, a person must create a new mental framework for understanding what is experienced and witnessed. For traditional cognitive or social intelligence, intelligent people rely on existing frames of reference and use them to generate appropriate responses to a given situation.

Appropriate and accurate cognition is insufficient; high cultural intelligence requires more than understanding—it requires motivation and capability to respond appropriately. A person may understand what is happening (and why) in a cross-cultural encounter, but may choose to ignore the situation or respond with incompatible actions. Returning to our example from Chapter 1 concerning the U.S.-China conflict over the midair collision of aircraft, we see the difficulties of motivation. Even realizing that a full apology and acceptance of responsibility was needed for the return of the American detainees, a number of American politicians insisted that such an apology would never be provided since the Americans were "in the right." However, the American government chose to provide what they viewed as a "full apology and acceptance of responsibility"; a more complete response than had been expected by the Chinese. Had the nay-sayers gotten their way, an apology might not have been provided, even if it was required by the Chinese government. Issues that are a "matter of principle" may interfere with a person's adaptation by inhibiting motivation.

Certain behaviors may be required for an appropriate response in a new culture that is not within the person's repertoire. There are a number of direct examples, such as the Ghanaian handshake that we described in Chapter 1 or a person's aversion for particular foods or even linguistic capabilities based on phonemic requirements (for example, generating certain sounds). A culturally intelligent person has the capability to acquire new behaviors that are needed for a given set of demands.

An action component of cultural intelligence has not been fully addressed in existing intelligence models. We emphasize that CQ requires action as well as intention. It is not enough to have a potential capacity to act since it is capacity in action that partially defines CQ. Throughout the remainder of our book, we refer to culturally intelligent behavior as action implemented, and not merely planned. Thus, cultural intelligence reflects an interaction among three elements—cognitive (direction), motivational (adaptation), and behavioral (criticism). As we discuss CQ, a person will be said to be low in CQ if one or more of these elements are weak.

## Definitions Underlying Our Model

Before we describe the details of our model and its relation to other frameworks, it is useful for us to provide a few definitions that underlie our approach. Our purpose here is to describe the constructs that provide a backdrop for our subsequent discussions of CQ. We begin by defining the basic concepts of culture and society since these are fundamental to understanding what is meant by cultural intelligence. We follow this discussion by distinguishing between universal (etic) and culture-specific (emic) constructs.

### *Culture and Society*

The most important starting point for our discussion focuses on the distinctions among concepts of culture, social context, and society. Researchers have defined culture in many different ways. Kluckhohn (1954) offered a useful definition by suggesting that culture consists of patterned ways of thinking, feeling, and reacting to various situations and actions. It is acquired and transmitted mainly by symbols, including their embodiments in artifacts. The essential core of culture consists of historically derived and selected ideas and especially their attached values. Culture can be seen as shaping the nature of social structures as they grow and adapt (Hofstede 1980). Hofstede (1980, 1991) provides a commonly cited definition of culture. His view holds that culture is best represented as a set of programming for people within a nation—the "software" of the mind. This approach has the strength of capturing a sense of culture as a psychological variable (Earley and Mosakowski forthcoming), although Hofstede specifically recommends against such cross-level comparisons. Societies shape their collectivities and social aggregates according to the rules implied by culture. Culture is sometimes viewed in terms of antecedents, such as time, language, and locality variables, as well as historical and ecological commonalties. Culture is a set of imperfectly shared rules for behavior and meanings attached to such behavior (Martin 1992).

Rohner offers useful distinctions of culture, social system, and society. He defined society as a territorially bounded, multigenerational population recruited largely through sexual reproduction and organized around a common culture and a common social system (1984, 131). He defined a social system as the behavioral interactions of multiple individuals who exist within a culturally organized population and culture as "*the totality of equivalent and complementary learned meanings maintained by a human population, or by identifiable segments of a population, and transmitted from one generation to the next*" (1984, 119; emphasis in original).

He acknowledges that the cross-generational transmission of cultural meanings within a society is imperfect. Over time individuals acquire variations on cultural meanings held by their predecessors imperfectly shared. Any two individuals from a common culture may hold slightly different meanings for the same event or construct, and these two individuals may have shared meanings with other parties in the society but not with one another. He states:

> It is probable that no single individual ever knows the totality of equivalent and complementary learned meanings that define the "culture" of a given population,

> and it is therefore unlikely that the person is able to activate, at any given moment, the full range of meanings that define the "culture" of his or her people. But complementary meanings free one from the necessity of having to know all of one's "culture." For example, most persons do not need to know how to behave as a physician or shaman if they are ill, only how to behave properly as a patient. (1984, 122)

Rohner's approach to defining culture provides an advantage over Hofstede's by separating culture from social system and acknowledging that culture represents imperfectly shared attributes of members within a social system. Culture is learned through a number of ways including child-rearing practices, peer transmission, and media, and this process is ongoing, with diminishing impact as individuals mature.

## Emic and Etic Constructs

Another important assumption of our model is that both emic and etic constructs and processes exist in a cultural setting (see Berry 1990; Earley and Mosakowski 1996, for a more complete discussion of these issues). Briefly, a construct is considered emic if it has its basis within a given culture (or group of cultures), and it is only fully appreciated within this context. An emic construct gains meaning from its context and cannot be appreciated fully absent a contextual interpretation. Relations among etic and emic constructs are presented in Figure 3.1; we illustrate the differences with an example.

The Chinese concept of "*guanxi*" has received much attention in the literature. Much of this work has been misdirected and reflects misunderstanding (Tsui 2001). Some scholars describe guanxi as bribes and gift giving, denoting corruption. Although this certainly may happen with guanxi, it is not an inherent part of the construct. Guanxi refers to the establishment of social relationships (Farh, Tsui, Xin, and Cheng 1998). Hwang (1987) provides a discussion of face, *renqing* (favors and emotion), and guanxi (social obligations and relationships) in proposing a model of social ties (relationships) and social tactics. He argues that face, and its maintenance, will differentially influence the type of tie used by a person (for example, expressive versus instrumental versus mixed), and therefore, the exchange practices among interacting parties. His focus is on the importance of face in maintaining status and position. An important point from his discussion of guanxi is that this is not bribery; guanxi refers to the provision of gifts as a token gesture intended to establish and build a relationship across parties. Without these symbolic gestures, the social bond among people is weakened. The emic concept of guanxi is critical as a person attempts to deal with the Chinese. Guanxi is highly situational and represented in the lower right portion of Figure 3.1.

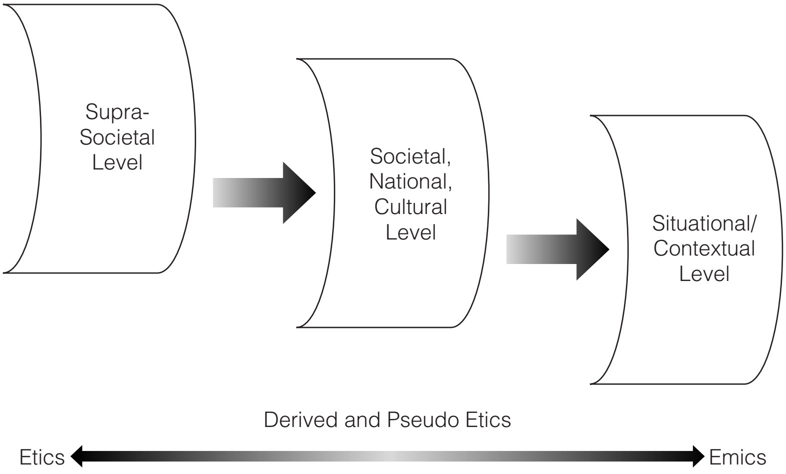
Supra-Societal Level
Societal, National, Cultural Level
Situational/ Contextual Level
Derived and Pseudo Etics
Etics
Emics

**Figure 3.1.** Interplay of Etics and Emics

Some constructs are etic or universal (Berry 1990; Earley and Mosakowski 1996). An etic characteristic exists across cultures and is universal. Many constructs are presumed etics only to find that they are not truly universal. An example of a universal is that all people have certain cognitive functions such as memory and recall (with the exception of people suffering from some impairment). Although people's memories and ability to recall events differs, these cognitive functions are ubiquitous. Some social institutions are etic such as marriage or mourning of a lost loved one (Berry 1997; Resaldo 1989). The presumption of a psychological universal is a difficult one to establish and defend. Murdock (1945) developed a list of seventy cultural universals that he argued were exhaustive and could be used to describe differences and similarities among cultures. These universals included variables such as food taboos, hospitality, trade, etiquette, and folklore. Universals such as these are represented in the upper left of Figure 3.1.

To complicate matters, there are a number of constructs that only appear to be universals. Berry refers to these constructs as "imposed-etics" (what Triandis refers to as the "pseudo-etic") or constructs that are derived in a limited number of cultural systems but do not really apply beyond the fringes of these cultures. An etic is imposed if it is developed in one subset of cultures and applied to others even if inappropriate to do so. Earley and Mosakowski (1996) described a parallel notion of the pseudo-emic, meaning that some constructs are assumed to be idiosyncratic and unique but, in fact, are not. An imposed-etic is represented in the middle of Figure 3.1, capturing some generalizability across cultures while being relatively situation specific. Berry suggested that at the extreme a pseudo-etic is a form of intellectual colonialism wherein the academic wisdom of one culture is imposed on others with exaggerated hubris. However, if one takes a more soulful look at purpose and intent, a different form of etic/emic construct may be observed, that of the derived-etic.

The identification of etics is something that Berry refers to as identifying derived-etics, meaning that a principle or construct is identified in a subset of cultures and then is examined in other cultures to assess its universality. The process of how one might identify and test derived-etics is very important but fraught with many difficulties (Leung and Bond 1989). The establishment of an etic requires the acceptance of a null hypothesis in a research study; an etic construct implies that no differences occur across cultures. For example, language is a universal that appears to require little further testing. However, what about social etiquette and face? Are there norms regardless of the culture whereby individuals attempt to maintain a positive self-image and regulate their actions with others to help them regulate it? Whether face is an etic would require that (ultimately) individuals across all societies are concerned with self- and other image. Not only is such a daunting task bordering on the impossible, but also the results would not be testable using traditional statistical methods (see Earley and Mosakowski 1996; Leung and Bond 1989, for a further discussion of this point). Most psychological and sociological principles fall into a derived-etic category, and we represent these at the midpoint of Figure 3.1. These constructs are an attempt at taking emic instances of some entity and building it into a general principle.

How does this discussion of etics and emics relate to our presentation of cultural intelligence? We make a number of assumptions concerning cultural intelligence and its universality/idiosyncrasy. There are several universal aspects of cultural intelligence. CQ consists of several sets of mental functions and self-concept that are etic. As an example, we adapt several motivation components of Erez and Earley's (1993) Self-Representation Theory to describe the motivational component of CQ. They argue that three motives of the self are etic (enhancement, efficacy, consistency), and we use the enhancement and efficacy elements as a way of discussing the role of motives in cultural intelligence. For example, CQ captures how much a person is willing to engage their environment proactively to adapt. Without sufficient efficacy, a person will not engage their environment and, therefore, will fail to adapt to his new context. This means that CQ is low for this person.

With that said, there are a number of aspects of cultural intelligence that are emic. As CQ is brought down to an individual, context-specific level, features are often emic. For example, the way to address an elderly and educated person in Thailand is properly done with a *wai* (clasping of hands in a prayer position with fingers extended facing upward in front of one's face and bowing slightly forward). This particular sign of respect is emic to Thai culture (although variations are observed in other high power-distance cultures). The practice of showing respect to this particular group within society reflects the specific interests and needs of this culture. In this sense, within most etic aspects of CQ lie emic aspects as well. The more proximate is behavior to cultural values and norms, the more likely it is to be emic rather than etic.

Thus, our basic assumption is that CQ is composed of these etic and emic aspects that are cascading down in hierarchical fashion. At the top of the hierarchy are those aspects of intelligence that reflect metalevel functions such as memory and recall, logic and deduction, and categorization. However, the specific type of logic and deduction used, categories formed, and so forth may be emic to a given culture (Nisbett et al. 2001). We might add as well that the cultural influence on these characteristics is incomplete and depends quite heavily on the unique experiences of each person. That is, people vary in their capability to store and recall information, form categories of experiences, and so forth. Thus, CQ paradoxically reflects a universal quality that is unique to each individual.

We now turn our attention to the description of our theoretical model.

## OVERVIEW OF CONCEPTUAL FRAMEWORK

Cultural intelligence has both process and content features. Its general structure consists of three facets including cognitive, motivational, and behavioral elements as depicted in Figure 3.2.

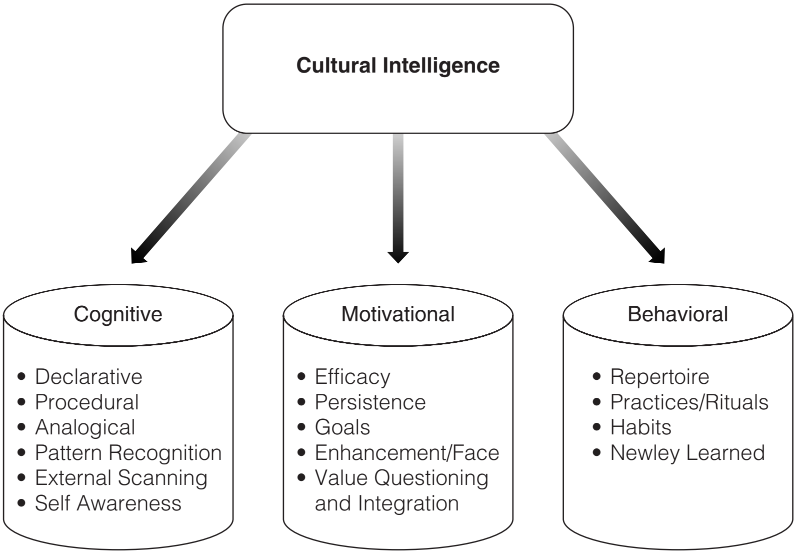

**Figure 3.2.** Facets of Cultural Intelligence

## Cognitive and Metacognitive Facet

The first facet refers to cognitive processing aspects of intelligence. This is most closely aligned to the traditional literature on intelligence, and much of what we draw on comes from existing models. We draw on several general sources as we discuss CQ from a cognitive facet approach including self-theory and social cognition, role-identity theory, and reasoning frameworks. These frameworks capture a person's knowledge of self as a filter of social information (self-theory), role identities as a social context for self-concept (identity theory), and mechanisms/styles of information processing and attribution (reasoning frameworks). Thus, we describe the cognitive aspect of CQ using knowledge of self, knowledge of social environment, and knowledge of information handling. The primary difference between our approach and more traditional assessments of intelligence is that we are more concerned with intelligence as a social recognition and interpersonal skill much like the divergence of social and emotional intelligence from the cognitive intelligence literature. Unlike social and emotional intelligence researchers, we are concerned with these capabilities with regard to a new cultural environment that is unfamiliar to a person.

We begin our discussion by looking at how people store, process, and retrieve social information that is fundamental cultural interaction—operating and acting on situations and information of a fundamental social nature. We are not concerned about other aspects of intelligence such as arithmetic problem solving or linguistic reasoning (except as they may impact the processing of social information). We focus on cognition relevant for comprehending and functioning within a cultural context. Three conceptual approaches serve to increase understanding of the cognitive facet of CQ—self-theory, social cognition, and analogical reasoning.

The self is a dynamic interpretive structure that mediates most significant intrapersonal and interpersonal processes (Gecas 1982; Markus and Wurf 1987; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997). Intrapersonal processes include cognitive information processing, affect, and motivation, whereas interpersonal processes reflect the interaction with the social milieu, including social perception, choice of situation, interaction strategy, and reaction to feedback (Markus and Wurf 1987). The self is a person's mental representation of her own personality, social identity, and social roles (Kihlstrom et al. 1988). The functioning of the self-concept depends on personal motives being served and on the configuration of the immediate social situation and roles enacted.

A useful framework for understanding how we organize multiple role identities is Identity Theory (Stryker 1980, 1987, 2000; Stryker and Serpe 1982). It holds that behavioral response patterns that are unique to situations involving group membership are organized as identities (for example, a person has separate identities as a student, a family member, and an employee). Identity theory differs from Social Identity Theory and Self Categorization Theory (Tajfel and Turner 1986; H. Tajfel 1982) in that its conception of identities is individual and involves role expectations and behaviors that are accepted and incorporated into the self, as opposed to an individual's reactions to collective identities based on socially defined categories. Stryker's Identity Theory explicitly brought social structural constraints into a symbolic interactionist conception of the self. In this theory, separate identities are ordered in a "salience hierarchy" for which highly salient identities are more likely to be evoked in response to a given situation. The salience of an identity is based on the individual's level of commitment to his social networks. Stryker defines commitment as "the costs to the person in the form of relationships foregone were she/he no longer to have a given identity and play a role based on that identity in a social network" (1987, 90).

One factor that this framework specifically recognizes as affecting the relative salience of identities is the social context of an individual (Earley and Laubach 2000). Normative control evokes identities whose behavioral patterns are constructed around merged interests with the organization. In this sense, normative control merges identities based in informal organizational groups with identities based in the formal organization. People operating under normative control have high levels of organizational commitment, or in structural identity theoretical terms have commitment to these merged identities (Burke and Reitzes 1991).

Another factor that our framework recognizes as influencing the salience of identities is the cultural context of the individual actors, as expressed in their culture-related values. For example, a worker from a collectivist culture would tend to have a higher commitment to an identity that reflects the interests of her in-group regardless of its position. If the in-group is the organization, as is fostered by clan-type organizations (Ouchi 1980), then the worker will respond to role expectations with the minimal efforts characteristic of normative control. However, if the worker's in-group is not the organization, and especially if its interests are in potential conflict with the organization (for example, class-based interests), then control methods must present role expectations in a way that favors evoking a subordinate identity over the competing in-group identity (Earley and Laubach 2000). In addition, a cultural value that favors high power-distance (for example, Mexico) relationships can support a worker's commitment to subordinate roles, facilitating the use of simple or bureaucratic control.

The importance of role identity for the cognitive facet of CQ cannot be understated. A person's role identities, social hierarchy, and face are strong determinants of how people process the cues relevant for cross-cultural interaction. We now turn to a more microlevel focus on social information processing and cognitive aspects of CQ.

Models of cognitive information processing within the social domain are known as models of social cognition. Such models enable us to understand how information from the social environment, as well as from internal cues, is sampled, processed, interpreted, and stored in cognitive schemas. Information that fits in with the cognitive schema is more likely to be accepted than conflicting information (Wyer and Srull 1989). Cognitive models of human information processing provide the theoretical foundation for understanding how people process information as they allocate various cognitive resources. Metacognitive approaches recognize that individuals not only process information but also have knowledge about their cognitive processes. This knowledge acts as a source of influence on behavior (Wyer and Srull 1989). Individuals are capable of self-regulating their behavior toward goal-attainment by taking various steps including self-monitoring (the attention people pay to their own behavior); self-evaluation (personal judgment of the discrepancies between a personal behavior and the goals and standards for behavior); and self-reaction (creating incentives for one's own actions and by responding affectively to one's behavior) (Bandura 1997).

Models of social cognition have mainly conceptualized the mechanisms through which information is processed, stored, and organized into a certain structure. Following this approach the self is viewed as a person's mental representation of her own personality, formed through both experience and thought, and encoded in memory alongside mental representations of other objects, reflected and imagined, in the physical and social world (Kihlstrom et al. 1988). Self-schemas are derived from past social experiences and consist of both structure and process. As such, the self is both the knower and what is known (Markus and Wurf 1987). The content of self-conceptions and -identities form the structure and anchors the self in the social system, whereas self-evaluation deals with the dynamic dimension of the self (Erez and Earley 1993; Gecas 1982).

On the structural level the self can be viewed as a collection of schemas, prototypes, goals, or images that are arranged in a space (Sherman, Judd, and Bernadette 1989). Each schema is a generalization about what the self is, containing descriptive information about traits, roles, and behavior, as well as procedural knowledge of rules and procedures for making inferences (Kihlstrom et al. 1988). A person's self-concept can be thought of as a collection of ideas and images concerning the state of an idealized and real world; most importantly, it acts as a filter for incoming information received. At this point, we would note that this is an important example of how CQ differs from a traditional view of cognitive intelligence since the "self-filtering" that we describe seems relatively less critical for an operation such as multiplying together two numbers versus determining why someone might have just slapped your face in response to a comment that you made. Social information processing actively involves the self-concept as an interpretive agent for the sense making required to understand social situations. This function of the self seems much less central (and critical) to abstract processing of mathematics.

The amount of information included in the self is vast and includes experiences concerning one's past, present, and anticipated future. However, not all the information is accessible all the time. In information-processing terms, the self represents declarative knowledge (consisting of abstract and concrete factual knowledge) of those attributes and features of which it is aware. The aspects of self brought to one's attention at any particular time are determined by contextual factors (Kihlstrom et al. 1988). The part active at any moment is called the "working self," or "the self-concept of the moment" (Markus and Wurf 1987). The working self directly encounters the environment. Compared to the deeper levels of the self-concept, it is more accessible, active, malleable, and tied to the prevailing circumstances. The configuration of the immediate social environment determines the facet of the self to be most accessible.

What is crucial from our perspective is how a person's self-concept influences the acquisition, processing, and reaction to social situations from a cultural perspective. The self-concept is a conduit funneling various life experiences and assessing them for meaning. The self is not a passive entity by any means; one's self-concept actively interprets and reorients one's social experiences so that one can make sense of any given situation. With regard to CQ, this suggests that people having a very strong and guarded sense of self will be relatively weak at adjusting to new cultural settings. That is, a clearly defined and relatively simple self-perspective may act to filter out the complexity of dealing with new situations requiring introspection and reforming one's self-concept.

Knowing oneself is not sufficient for high CQ because awareness does not guarantee flexibility. A certain level of cognitive flexibility is critical to CQ since new cultural situations require a constant reshaping and adaptation of self-concept to understand a new setting. Flexibility of self-concept and ease of integrating new facets into it are associated with high CQ since understanding new cultures may require abandoning preexisting conceptualizations of how and why people function as they do. But flexibility is only part of the issue; high CQ requires a capability of a person to reformulate their self-concept (and concept of others) in new complex configurations. Thus, flexibility *and* a capability to inductively reorganize one's self-concept is necessary. An exception to this argument might be someone who is bi- or multicultural since self-knowledge in this case implies awareness of more than a single culture. Such an individual may have a sufficiently complex self-concept to reflect the flexibility needed for CQ.

High CQ requires both inductive and analogical reasoning. These two forms of reasoning are essential for how a person can approach and understand a completely new context without being constrained by past experiences and preconceived ideas. Take, for example, an anecdote relayed by Hall (1976) and his experiences staying in hotels in Japan. After a short visit in his hotel (several days of a stay that was to last approximately one month), he returned to his room only to find that he had been moved to another room. After several more days, he found that he had been moved again. This room shuffle reoccurred when he stayed in a small hotel in other parts of Japan as well, and he initially concluded that he was being moved around because of his low status (*gaijin*, or foreigner) within the culture. That is, the reason he was moved about was because higher-status patrons wanted his room. At one hotel in Kyoto, he was even moved from one hotel to another! His cultural frame and self-concept suggested that he was moved around because of low status. As he later determined:

> It was my lack of understanding of the full impact of what it means to belong to a high-context culture that caused me to misread hotel behavior at the Hakone. I should have known that I was in the grip of a pattern difference. . . . The answer to my puzzle was revealed when a Japanese friend explained what it means to be a guest in a hotel. As soon as you register at the desk, you are no longer an outsider; instead, for the duration of your stay you are a member of a large, mobile family. *You belong.* The fact that I was moved was tangible evidence that I was being treated as a family member—a relationship in which one can afford to be "relaxed and informal and not stand on ceremony." This is a very highly prized state in Japan, which offsets the official properness that is so common in public. (1976, 65)

Hall interpreted room and hotel shuffling as a sign of low status, consistent with an American perspective. However, inductive reasoning might suggest that only a close friend would be imposed on by a Japanese host.

A person having high CQ needs to have very good inductive reasoning since many new cultural contexts provide, at best, ambiguous and, at worst, misleading, cues for what is happening. Analogical reasoning is important as well; it helps a person transfer knowledge and experience from one domain to another. Thus, the experiences that Hall gained from his hotel stays might be combined with other types of experiences to form a sense of his actual status within the Japanese community.

Thus, CQ reflects cognitive-processing capabilities in a number of ways. First, CQ captures a person's self-concept and its degree of differentiation and flexibility. A person having a high CQ has a well-differentiated concept of self but a high degree of adaptability. Incorporating new information and using the self as a complex filter for understanding new cultural settings is critical. Second, a social information-processing perspective is a useful way of thinking about the cognitive facet of CQ. That is, we can think of the information that people have about themselves and others as a hierarchically organized schema along with the various features of a schema-based approach. Third, inductive and analogical reasoning are particular forms of cognitive intelligence central to CQ since many new cultural situations require that a person step beyond their existing knowledge in order to fully understand what is going on around them. This is not merely empathy since the cues to determine another person's affective state that an empathetic individual relies on may be absent or conflicting with what he is expecting. A high CQ person must inductively create a proper mapping of the social situation to function effectively. However, a full understanding of the social situation is only the beginning.

## Motivational Facet

In discussing the influence of a person's motivation as a component of cultural intelligence it is important to return to a person's self-concept (Epstein 1973; Erez and Earley 1993; Greenwald 1980; Markus and Wurf 1987; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997). That is, cultural intelligence reflects self-concept and directs and motivates adaptation to new cultural surroundings. To organize our thinking, we draw from Erez and Earley's (1993) Cultural Self-Representation Theory. According to their model, the self can be thought of as embedded within a general system having four elements, including cultural context, management practices, self-concept, and work outcomes. Self-concept, a key to our discussion of cultural intelligence, refers to three self-motives underlying a cognitive structure. These self-motives are enhancement, efficacy, and consistency.

### *Self-Enhancement*

The experience of self-enhancement is affected by opportunities in the environments and by self-regulatory processes of sampling, assessing, and interpreting such opportunities. Research on the information-processing consequences of self-enhancement continues to grow. This research demonstrates the existence of self-serving bias in information processing (Kunda 1987). For example, individuals are more sensitive to self-relevant stimuli than to stimuli with a low relevance to the self, they process more efficiently self-congruent stimuli, and they resist incongruent information. Self-relevant stimuli show enhanced recall and recognition (Markus and Wurf 1987). Numerous studies have demonstrated that self-referent information is more highly recalled than other-referent information, or semantic information (Kihlstrom et al. 1988; Markus, Kitayama, and Heiman 1997). Accessibility of a memory is a function of the degree to which the stimulus information makes contact with preexisting knowledge during encoding (Kihlstrom et al. 1988). The fact that self-referent information is more highly recalled than any other type of information attests the centrality of the self-concept in a cognitive network.

One manifestation of self-enhancement is a person's tendency to distort reality to maintain a positive self-image (Gecas 1982; Markus, Kitayama, and Heiman 1997). For example, people choose to judge others on dimensions that are personally relevant to them and ignore dimensions not personally salient. They prefer and seek out positive information about themselves, and they selectively sample, interpret, and remember events that support a positive self-concept.

### *Self-Efficacy*

Self-efficacy is another facet of the self. Perceived self-efficacy is "a judgment of one's capability to accomplish a certain level of performance" (Bandura 1986, 391). People tend to avoid tasks and situations they believe exceed their capabilities. Efficacy judgments promote the choice of situations and tasks with high likelihood of success and eliminate the choice of tasks that exceed one's capabilities. Four sources modify the perceptions of self-efficacy, including enactive attainment based on authentic mastery experiences; vicarious experience reflecting the observation of others' actions and outcomes; verbal persuasion which influences self-efficacy (for example, positive persuasion leads people to believe that they are capable of obtaining their goal, and consequently, they become more committed to the goal and allocate more resources to their mission); and physiological arousal as it serves as a basis for evaluating one's capability (with fatigue, stress, and anxiety indicating that a person is not at his or her best and, therefore, attenuates self-efficacy).

Self-efficacy has been mainly developed with respect to the individual (Bandura 1986, 1997). However, a perceived collective efficacy is crucial for what people choose to do as a group, how much effort they put into it, and how persistent they are when facing failures. The strength of groups, organizations, and nations lies partly in people's sense of collective efficacy (Bandura 1997). It is not clear how, exactly, the social environment shapes a person's collective efficacy and whether it is more likely to develop in certain cultures than others. Bandura (1997), Erez (1997), Markus and Kitayama (1991), and Triandis (1994) are among the scholars who suggest a number of ways that cultural syndromes can influence either individual or collective efficacy. Recent empirical work by Earley (1999) demonstrated at least one avenue through which efficacy expectations are shaped interactively by culture and group context. He formed three-person teams of managers coming from four countries—two high in power distance (France, Thailand) and two low in power distance (England, United States). Country of origin was fully crossed with status characteristic such that a single status characteristic (age, gender, or education type) existed with any given team, resulting in twelve possible team types (country × status characteristic). Team members were exposed to a task after which they made individual judgments of their team's capability for a subsequent performance period. Next, they were asked to form a single, collective judgment to reflect their team perception of efficacy. Earley found that in the two high power-distance cultures, team members possessing high-status characteristics had an inordinate influence on successive, collective efficacy judgments (either raising or lowering it) relative to other team members. Further, collective estimates of efficacy (averages of team members' estimates of group efficacy) were more strongly tied to team performance than aggregate individuals' estimates. This "follow the leader" effect illustrates the potential influence of cultural context and personal characteristics on collective efficacy.

Self-efficacy plays an important role in CQ because successful intercultural interaction is based on a person's general sense of confidence for social discourse in a novel setting. An example of this is a person's use of a foreign language. A person learning a new language and who has a very good memory for sounds and words may still be very hesitant to speak a foreign language in public for fear of embarrassment. Although he or she is cognitively aware of the words and phrases to be used he or she is unable to engage another person in conversation due to a reluctance and low efficacy for conversation. This motivational facet of cultural intelligence is weak, so adaptation will not occur.

### *Self-Consistency*

Although the motives of self-enhancement and self-efficacy have been studied a great deal, self-consistency has received little empirical and conceptual attention (Erez and Earley 1993). Self-consistency refers to a desire for individuals to maintain coherence and consistency in their experiences and cognitions. It has two aspects (Erez and Earley 1993): first, it leads to the active construction of memories and selective perceptions in line with previous events; second, it activates and directs people to behave congruently with their values and norms.

A self-consistency motive gives rise to several processes and outcomes (Erez and Earley 1997; Markus and Wurf 1987). First, people exhibit a continuity of image such that they view themselves as similar across time periods. Second, individuals construct views consistent with their self-image. Finally, individuals are resistant to information discrepant with their self-image and they are likely to make situational attributions for personal actions inconsistent with their self-image. Thus, an employee who has a strong self-image of mechanical dexterity may attribute his inability to master a new machine operation as due to environmental disturbances rather than poor dexterity. It is important to note as well that self-motives are shaped by culture. For example, mechanical skills for American males are valued generally, so it should not be surprising that many American males incorrectly perceive themselves as being manually dexterous and capable of working on the family automobile.

The implications for a self-concept model for cultural intelligence are numerous. First, a person's proactive engagement of new cultural circumstances is highly influenced by a sense of self-efficacy. Some individuals are highly efficacious concerning unfamiliar social settings and how to mix and learn more about people from unfamiliar cultures. Further, high efficacy means that as individuals confront obstacles, setbacks, or failures they will reengage with greater vigor rather than withdraw (Bandura 1997). This feature of efficacy is critical for cultural sojourner because much of discovering and adapting to a new culture means overcoming obstacles and setbacks. Highly efficacious people do not require constant rewards to persist in their actions; not only may rewards be delayed, but also they may appear in a form that is unfamiliar (and thereby not appear as a reward). People having low efficacy expectations are unable to maintain commitment to a course of action under such duress.

Second, efficacious people are likely engaged in goal setting that is known to have highly positive effects on performance and action (Locke and Latham 1990; Wood and Bandura 1989). For example, Wood and his colleagues (for example, Wood and Bandura 1989) examined the relationship of goal setting, task strategies, and efficacy expectations to performance using a simulated work organization. Although there are a number of important subtleties of their results, a general finding was that efficacy expectations were positively related to the goals that people set for themselves and this, in turn, influenced their task strategies and task performance. The positive influence of efficacy on the goals people set is well documented by Bandura, Cervone, Locke, and Wood, among others (see Bandura 1997; Locke and Latham 1990, for excellent reviews of this literature).

Interestingly, much of the effect of efficacy and goal setting on performance may be due to their effects on the task strategies and search processes used by individuals (Locke and Latham 1990; Wood and Bandura 1989). That is, efficacy and goal setting both have the effect of expanding and intensifying a person's search for the best way to engage their task environment. This effect of "working smarter" and not just "working harder" (Earley and Ekegren 1989; Earley, Wojnaroski, and Prest 1987) is important for cultural intelligence since adaptation requires not merely effort; effective adaptation requires intelligent adaptation that is guided by appropriate goals.

A self-concept perspective is important for cultural intelligence in other ways as well. For example, the self-enhancement aspect of a person's self-view implies that one seeks out those situations for which one derives the most pleasure and avoids discomfort (Thorndike 1920) as intelligent creatures. But what might this imply for the culturally intelligent person? In this case, we would argue that a very high self-enhancement motivation for a person is somewhat disadvantageous since the very nature of adjusting to a new culture requires prolonged reinforcement periods and ample opportunity for failure and negative consequences. Delayed gratification is an important facet of cultural intelligence since people make mistakes early in their cultural encounters and are more likely to receive failure feedback before they receive success feedback. Perhaps more important from a CQ perspective is what Erez and Earley (1993) referred to as "collective self-enhancement," or a person's feeling of importance and significance derived from others around him or her. That is, high CQ reflects a strong motive for enhancement based on collective (group) interaction and reward. Such reward may be delayed and intermittent and is likely to come from social and group sources. Since self-concept is tied to the social milieu, a high CQ person will engage others proactively for information relating to him or her. If self-enhancement is derived from internal and personal sources then a low enhancement motive is likely to be associated with high CQ. That is, high enhancement based on internal referents will distract a person from exploring their external world and, therefore, hinder learning about it. If, however, a person's enhancement is based largely on collective sources, then an enhancement motive is likely to be associated with high CQ. Thus, the relation of self-enhancement to CQ is complex.

Finally, consistency motive is negatively related to CQ. A person with a high consistency motive will have a lower CQ. A strong motive for consistency reflects an inability for personal adjustment to new surroundings and a poor capacity for incorporating highly disparate ideas (as will likely be found in a new culture). Generating adaptive strategies and effectively monitoring the environment requires a capacity for divergent thinking and incorporating divergent views. Taken to an extreme, a very high consistency motive leads a person to ignore or reject information inconsistent with one's self-image even if this information may be critical for understanding a new culture. A high consistency person is rigid as he or she encounters new ideas and perspectives, such as what happens when encountering a new culture.

Imagine an American expatriate manager who insulates himself from the local flavor of a culture by living in an expatriate neighborhood, sending his children to the "American school," buying from American specialty stores, and so forth. In one area of Hong Kong (just off the downtown), it is possible to walk from pub to pub hearing nothing but Australian and English accents and to mistake the area for downtown Sydney or London. In most major cities in Asia there are "expat alleys" consisting of pubs, restaurants, shops, and the like for Western expatriates. We do not intend this as criticism of expatriate managers seeking out comforts of home in their local environments—this type of "bringing it with you" is common and functional in many regards. When the first author councils expatriate managers about adjusting to a new culture, he emphasizes that even people having low self-consistency motives require some attachments to home as a way of maintaining a general sense of welfare. Simple routines such as getting a newspaper or buying a cappuccino reconnect an expatriate with her home culture. However, an overly active consistency motive may result in isolation and an overreliance on his or her own culture. A high CQ manager balances the need for home environment continuity with understanding the unique aspects of his or her new host culture.

Another aspect of high consistency relates to how one stores information about one's perceived environment. A schema-based view of mental functioning is useful for understanding how an expatriate might adjust to a new environment. Processes underlying schema formation are tied to the self-motives. There is a tendency for self-schema to become rigid and not easily reorganized for people having a high consistency motive (Erez and Earley 1993). This means that people high on consistency resist assimilating information that may contradict their preexisting views. This is problematic for a person's adjustment to a new culture and, therefore, reflects a low CQ.

Another feature of personal motives related to CQ is that norms and values are important aspects of the self as they guide what features of the social environment that a person attends to and what she or he values (Schwartz 1992, 1993). (A full review of personal and cultural values is well beyond our means in this book, and the interested reader is referred to a number of seminal sources including Glenn and Glenn 1981; Herskovits 1955; Hofstede 1991; Kluckhohn 1954; Kluckhohn and Strodtbeck 1961; Rokeach 1973; and Schwartz 1992, 1993.)

Personal and moral values are described in work by Wilson (1993). He argued that there are four general moral anchors across societies, and that these moral orientations provide a general perspective of how more specific cultural (and personal) values are formed. Wilson's four universal morals are sympathy, fairness, self-control, and duty, and he argued that these four sentiments constitute a moral sense in all people.

Sympathy refers to a capacity for being affected by the experiences of others. For example, imagine a benefactor who gives a generous gift and receives public recognition in return. Although the benefactor may have provided the gift for public recognition, Wilson queries why observers would recognize the act if they suspected that the deed was not purely altruistic. He concludes this is because people wish to encourage in one another the sentiment of sympathy, even a potentially jaded act.

Fairness reflects the outcome and procedural standards by which actions are judged as fair or just, a finding well supported in an organizational context (see Greenberg 1996; Greenberg and Lind, 2000; Lind and Earley 1992; Lind and Tyler 1988; Thibaut and Walker 1978, for a more general discussion of justice). Outcome (or distributive) fairness refers to the perceived reaction of people to the allocation of limited resources (Adams 1965). The most common distinction for the rules to allocate/distribute outcomes is broken out into three rules: (1) equity (in relation to input); (2) equality (equal shares regardless); and (3) need (based on a person's needs). (The specific research focusing on the various rules used for such allocations is beyond the scope of this book but the interested reader is referred to Adams 1965; Deutsch 1958, 1962; Deutsch and Krauss 1962; Foa and Foa 1976, 1974; Frank 1988; Greenberg and Lind 2000; Rawls 1971; Tjosvold, Hui, and Law 1997, for several interesting discussions of these allocation rules.)

Several allocation rules, such as equity, individual effort, equality, and need (Fiske 1991), are used in social and economic exchanges among group members. What is relevant to our model is that the exchanges that occur within a group may be guided by several different rules (or norms), and that these rules vary according to cultural characteristics. For example, Leung and Bond (1984) found that in collectivistic cultures equity or equality norms are preferred depending on whether one is dealing with in-group or out-group members. When dealing with in-group, their subjects (Chinese) preferred to use an equality norm for allocation and exchange, whereas in dealing with out-group they followed a strong equity norm. Tornblom and colleagues (Tornblom, Jonsson, and Foa 1985) found that an equality norm was preferred over a need and equity norm for exchange in Sweden. Clearly, the preferred exchange relationship varies as a function of cultural background.

Another aspect of exchange is that of justice related to the procedures that are used to determine outcomes. The opportunity to control the procedures used to make a decision enhances judgments of outcomes from the procedures (Lind and Tyler 1988; Thibaut and Walker 1978). Research suggests that such process control improves reactions to allocation decisions and performance even if outcomes are not favorable to the person (Baron and Cook 1992; Bazerman, Loewenstein, and White 1992; Bies 2000; Folger 1977; Lind et al. 1978; Lind and Earley 1992; Lind, Kanfer, and Earley 1990). Advocates of this position argue that merely having control, or input, over the procedures that are used to determine outcomes in various exchanges is sufficient to make people feel as if those outcome allocations are just and fair. These effects are consistent across many types of tasks and settings as well as national cultures. For example, Leung and Li (1990) examined the relation of cultural background to reactions to procedural fairness interventions and found convergence with Western findings.

A theory forwarded by Lind and Tyler (1988) to account for a process control effect is called the Group-Value Model. It argues that the opportunity to provide input into a procedure has a positive impact on an individual's reactions because the providing input affirms that an individual is a valued member of his group. That is, people value having input opportunities because it suggests that their views are worthy of being heard (Lind and Tyler 1988, 230–40). Again, we would expect cultural variations in what individuals expect in terms of providing input (voice) as well as satisfaction with it. The nature of exchange in groups reflects cultural differences and similarities in allocation rules as well as procedural influences.

These two forms of justice are presumed to be separate from one another, although there is debate about this point despite years of research from both positions. The critics of procedural justice argue that procedures are important in as much as they help a person ensure that she gains the outcomes she desires. Procedural justice researchers argue that procedures have an effect independent of the outcomes received. Few studies have attempted to tease apart these effects, but one such study was conducted by Earley and Lind (1987). Studies conducted in Hong Kong and elsewhere verify a cross-national similarity of procedural justice effects (Leung 1985; Leung and Park 1986).

Self-control refers to an individual's restraint in the present on behalf of the future, or delayed gratification. For example, a student who pursues her doctoral studies may live as a pauper for a number of years in order to obtain the skills, knowledge, and credentials needed for a prestigious faculty position. An organization that channels its extra profits into research and development rather than issuing extra dividends will ensure a more profitable future for itself (and its shareholders).

Finally, Wilson's concept of duty refers to an individual's willingness to be faithful to obligations derived from society, family, and important referent others. For instance, Huston, Geis, and Wright (1976) looked at the actions of a number of "good Samaritans" (people who intervened on behalf of others during a crisis). They found that many Samaritans acted because it appeared to be the right thing to do rather than due to sympathy for the victims per se. It is through these four sentiments that Wilson argues people function and behave within a society.

These moral imperatives are related to cultural intelligence in that they provide a universal perspective on cultural standards and values. Individuals who are highly aware of these core values and possess them personally may be more adept at adjustment. For example, a strong moral sense of self-control is important for the type of delayed gratification often received in a cross-cultural encounter. An expatriate manager will often receive more negative than positive feedback during the early stages of a new work assignment, so a willingness to await gratification is of obvious importance. A sense of moral obligation to one's society may facilitate or inhibit cultural understanding. To possess a strong sense of obligation means that one is aware of what these obligations are and their significance. It is highly likely that someone who feels strong personal obligations to others will effectively identify obligations that exist in another. If I place a great value on knowing and fulfilling my duty to others in my culture, it is probably true that I am sensitive to such duties and I will have developed skills to ascertain what these obligations might be and how to fulfill them. In contrast, excessive dedication to particular moral obligations may reflect a fanaticism that is detrimental to intercultural understanding.

### Behavioral Facet

CQ requires knowing what to do and how to do it (cognitive) as well as having the wherewithal to persevere and exert effort (motivational). However, it requires something else as well; it requires having in one's behavioral repertoire responses needed for a given situation. Lacking these specific behaviors, a person must have a capability to acquire such behaviors.

For the purposes of this discussion, we adopt the definitions offered by Dunnette (1976), who differentiated aptitudes, abilities, and skills as follows. An aptitude refers to the cumulative influence of one's general experiences in everyday life. It reflects as well a capacity that a person has to acquire additional ability corresponding to a given aptitude. Ability can be thought of as aptitude in action; that is, an ability reflects specific content (mental or physical) of achievement. Thus, it is possible to discuss how a person's language aptitude leads them to have an easy time at acquiring a new language. The capability to acquire the new language reflects aptitude whereas the actual language mastery reflects a new ability. Aptitude is a higher-level construct in the sense that it captures a large domain of potential abilities (an aptitude for language may reflect a person's acquisition of several, or many, languages). Ability is a domain-specific set of skills that a person has acquired over time. Finally, Dunnette described a skill as physical and motor aptitudes and abilities. Although he related it to a level of proficiency in some general form, he emphasized that it was not merely a high level of proficiency concerning some ability. He emphasized, however, that these three are not as easily distinguished from one another as might be desired by some scholars. In describing it, he said:

> Perhaps the reader by now suspects that this is all part of a tedious joke. If so, the point is made. No truly satisfying closure can be derived from efforts to define these terms. They all lie within the domain of maximum performance mentioned by Cronbach, and they *are* discriminably different, but subtle nuances are not important. As we proceed, their relative distinctiveness will become more clearly apparent in relation to their behavioral referents and according to their relationships with work performance differences. (Dunnette 1976, 475; emphasis in original)

Similar distinctions are provided by others such as Campbell and Campbell (1988), who describe abilities as relatively stable characteristics of individual differences but who go on to collapse abilities with aptitudes in referring to them as comparable antecedents of individual-level performance. Likewise, Ilgen and Klein refer to ability as "those personal characteristics that relate to the capability to perform the behaviors of interest" (1988, 146).

We agree with Dunnette's assessment that a detailed distinction among ability, aptitude, and skill constructs is not warranted for all purposes. That said, it is useful to maintain a general sense that aptitude reflects a capacity, whereas ability reflects actual accomplishment. We will use these terms in this fashion but with the view that abilities and aptitudes are overlapping and nonexclusive categories. For us the key distinction is that one is a more general capability or potential in reserve than the other. CQ captures both of these aspects underlying performance in a number of ways.

With regard to potential and future capacity (aptitude), CQ reflects a person's capability to acquire new behaviors appropriate for a new culture. We gave several examples earlier, such as learning a handshake in Ghana or an appropriate smile in Thailand. These examples are obvious and direct styles of behaving appropriately in another culture. Other behaviors require much more sophistication. Difficulties in acquiring a new language, including mastering accurate pronunciation of tones and phonemes in languages such as Mandarin or Thai, can be important to cultural adjustment. Given that language conveys many subtleties of a person's culture, it is our argument that people who lack an aptitude for acquiring languages, *at least at* *some reasonable level of proficiency*, will have a low CQ. We are not positing a causal connection between language acquisition and CQ; we are merely arguing that the two are correlated.

A person's behavior is tied to CQ in more indirect ways as well. There are instances in which a person may know and wish to enact a culturally appropriate behavior but he or she cannot do so because of some deep-set reservation. Our example from Chapter 1 described an expatriate who is provided with a plate filled with a local delicacy of fried earthworms and grasshoppers but who is unable to overcome her revulsion and eat the meal provided. This type of behavioral response (or lack of it) can be thought of in behavioristic terms (Luthans and Kreitner 1985). That is, the specific reinforcement history of an individual bears strong relevance to her execution of particular actions in a new cultural setting. Although there is this strong tendency for current psychology to dismiss a strong behavioristic orientation, there is merit to the view that certain behaviors that are acquired may actively inhibit or interfere with the display of other ones. To make matters worse, in an intercultural encounter, even if a person is able to provide a desired response eventually, it remains a problem that the host may detect this hesitation and react negatively.

Behavior properly executed requires a willingness of a person to persist over time. Persistence is necessary for the acquisition of new skills and so is a person's aptitude to determine these new skills. That is, it is not merely enough to be willing to try and learn new behaviors; a high CQ person has an aptitude to determine desired new behaviors and how to learn them.

Thus, the behavior facet of CQ is tied to both the cognitive and motivational aspects (as are these two facets tied to one another). The development, and subsequent execution, of new behaviors requires recognition that the behavior is new and different (for example, the Thai smile for nervousness is different than the one for anger). It requires as well that a person persist and work hard to properly execute the behavior. This means that the behavioral facet is often a product of the cognitive and motivational facets of CQ.

This is not the limit to the behavioral facet. Returning to our example of the food revulsion and one's reinforcement history we can see that the behavioral facet requires flexibility for the high CQ person. Even if a person is inclined to refuse the interesting bug delicacy it is possible for her to overcome this revulsion and try the food. Whether she really has high CQ is reflected in her controlling her reactions to the meal (not conveying hesitation, revulsion, and so on) to her host as she consumes the food. The behavioral repertoire of a high CQ person is flexible and broad as well as easily adapted. So CQ does not merely reflect that a person can "force herself" to do things she might find undesirable or repugnant; simply forcing oneself to engage in particular actions may result in subtle cues being conveyed to a host such as nonverbal leakage. (Nonverbal leakage occurs if nonverbal cues such as body orientation or facial expression are inconsistent with the verbal message sent by an individual. For example, if a spouse admits that he was wrong concerning the choice of, say, a movie but he rolls his eyes and has a smirk on his face, the message actually conveyed to his spouse is likely to be interpreted by her as not taking her complaints seriously.) A person having high CQ is able to control his physical display sufficiently well so that nonverbal leakage and other subtle confusions are not conveyed. That is, a high CQ person has a strong mastery and sense of emotional display and physical presence.

People having high CQ use the cues that they gain from others to infer accurately their states and views. Role modeling provides an important contribution to behavioral CQ. Myriad cues are provided through observing others, and observing their reactions as one interacts with them; a person high in behavioral CQ integrates and mimics these cues and behaviors (Chartrand and Bargh 1999). Work on mimicry suggests that the effective mimicking of another person's behavior, even if done unconsciously, results in an increased satisfaction with the interaction. Further, mimicry has even been found to result in spouses looking alike over time (Zajonc, Adelmann, Murphy, and Niedenthal 1987)! Mimicry is subtle and even unconscious (Chartrand and Bargh 1999), but it results in generally positive effects in a social encounter. A high CQ person is a talented mimic, although whether such mimicry must be under the consciousness of a person will be discussed later in this study.

It is not simply enough that a person is an effective actor able to control personal displays and actions; she must be able to use the various behavioral cues provided by others to interpret their actions and underlying motives. That is where self-presentation comes in. People do not wish to do things intentionally to make them appear incompetent, undesirable, or unattractive. But, what is particularly difficult in cross-cultural encounters is that often, people are expected to behave appropriately in highly unfamiliar settings and as part of unfamiliar rituals.

Returning to our Canadian expatriate manager who is newly hired to run a Thai factory we can see the various ways that behavior operates. The manager goes to the shop floor and begins to wander around the factory. As he encounters various employees he notices that they stop working and smile at him very consistently, and some of them give him a Thai *wai* (head bowing and hands clasped as a sign of deference). Later that day he sees an employee who is dealing with a factory problem of a very significant nature and sees this other employee smiling as well. Finally, on the way home he crosses a very busy road in Bangkok and is nearly hit by a taxi and the driver is smiling at him. The expatriate wonders to himself: Why are these Thais smiling all the time? The next day, there is a bit of trouble and the manager has to intervene and provide strong reprimands to two employees. As he does this, he forces himself to keep a bit of a smile on his lips since he anticipates that this will help reduce the general tension of the reprimand. Afterward, he notices that the two employees are very confused and frustrated with the whole incident (based on what he has heard from a second-in-command). The following day, both employees quit their jobs.

In this example, the problem confronting the expatriate manager is multifold. First, he failed to observe the *type of smiling* witnessed in the various incidents since distinctive smiles were used. Second, he failed to realize that in a high power-distance culture such as Thailand there is no compelling reason for a superior to use smiling as a means of reducing tension in a reprimand situation. Third, his smile was not only the wrong type but his nonverbal leakage conveyed his own high degree of personal discomfort; the two employees sensed it. High CQ means having sufficient control and observational skills to determine what cues within the setting justify an employee smile at various times, what is the nature of the smile itself and how it differs across settings, and how to respond consistently and appropriately with the existing practices of a culture.

The behavioral facet is strongly tied to the cognitive and motivational facets since one must have an underlying psychological structure that can guide our acquisition of the "correct behaviors" to observe and to react accordingly. From a cognitive facet perspective, this means correct problem and situation recognition and appropriate "filing" of the event for subsequent processing and problem solving/reasoning. From a motivational facet perspective, this means having sufficient control and composure to convey exactly what is intended in a response. The interplay of motivational and behavioral facets is a similar aspect of emotional intelligence described by Mayer and Salovey (1993) and Howard Gardner (1983). What is operating is described by Gardner:

> The core capacity at work here is *access to one's own feeling life*—one's range of affects or emotions; the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behavior. In its most primitive form, the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain. . . . At its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feelings. (1983, 239; emphasis in original)

With this description of intrapersonal intelligence the emphasis is on introspection and self-reflection to generate an appropriate emotional response to guide action. Our description of the behavioral facet does not necessarily require such a deep level of self-analysis, nor does it require such incredible command of one's emotional states as is implied by Gardner. If we take the analogy from acting of a method actor (who actually experiences and lives her role including the concomitant emotions and views) versus a role-based actor (who portrays the role as that—a role to be mimicked and portrayed) we can see that Gardner is describing a level of control that is clearly akin to the method actor. We do not see any advantage in this degree of internal control and regulation since skillful actors can portray even complex emotions and actions without becoming the role they portray. A person with high CQ has such insights and control but does not have to become so immersed into a situation that he or she is lost to it. In addition to these facets of CQ there are a number of processes that are core to how people deal with new and unfamiliar cultures.

## PROCESS ASPECTS OF CULTURAL INTELLIGENCE

Our approach to process is presented in Figure 3.3.

Several general features of process underlie cultural intelligence. The overarching frame consists of three analysis levels (universal-level to setting-specific). Knowledge is organized into two general categories—declarative, or what it is that we know about something, and procedural, or what we know about how to do something (Ackerman and Heggestad 1997; Cohen and Bacdayan 1994; Singley and Anderson 1989; Squire 1987; Tulving and Schacter 1990). The simplest way to think about these two general categories of knowledge is that declarative knowledge is information about the characteristics of an entity (for example, a refrigerator keeps objects cold) whereas procedural knowledge describes the way something functions (for example, a refrigerator has a coolant circulating through various heating coils that act to extract the heat from the ambient environment and this heat is then given off by the coolant and recirculated). That is, declarative knowledge concerns facts, propositions, and events, whereas procedural knowledge concerns underlying function and actions (Cohen and Bacdayan 1994). Both types of knowledge exist at our three levels of analysis that we describe in Figure 3.3; they differ in general specificity and link to a social setting.

A universal-level refers to knowledge innate to people. Declarative and procedural knowledge need not be learned (although they can be sharpened and adjusted through intervention). Basic psychological functions such as memory storage and recall, sensory encoding, and language (the capacity for language rather than a specific language) are examples of procedural knowledge at a universal-level. Declarative categories include distinguishing living from nonliving, universal conceptions of good versus evil (not the definition of each, but the existence of these universal categories) or self-conceptions that differentiate self from others.

In general intelligence, some of these innate capacities might include processing speed and hemispheric specialization (Luria 1980) or processing time as reflected in reaction-time studies (Jensen 1982a). For example, Reed and Jensen (1992) used performance on a pattern-reversal task (checkerboard task) to measure two medium-latency evoked potentials. They found that the correlations of latency to IQ were modest in magnitude but significant in a number of cases. Likewise, McCarthy and

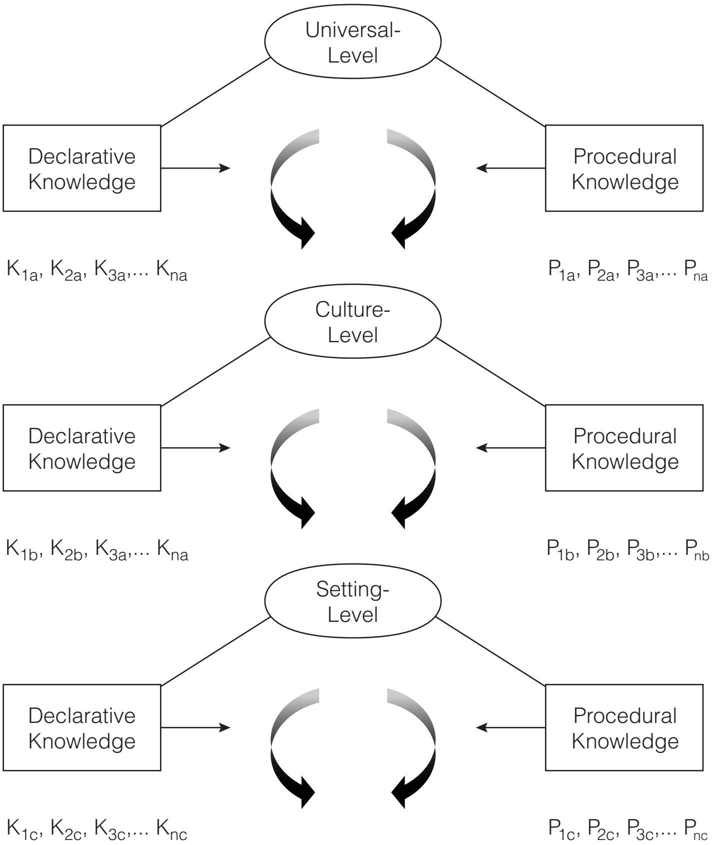
Universal-Level
Declarative Knowledge
Procedural Knowledge
$K_{1a}, K_{2a}, K_{3a}, \ldots K_{na}$
$P_{1a}, P_{2a}, P_{3a}, \ldots P_{na}$
Culture-Level
Declarative Knowledge
Procedural Knowledge
$K_{1b}, K_{2b}, K_{3a}, \ldots K_{na}$
$P_{1b}, P_{2b}, P_{3b}, \ldots P_{nb}$
Setting-Level
Declarative Knowledge
Procedural Knowledge
$K_{1c}, K_{2c}, K_{3c}, \ldots K_{nc}$
$P_{1c}, P_{2c}, P_{3c}, \ldots P_{nc}$

**Figure 3.3.** Processes Underlying Cultural Intelligence

Donchin (1981) found that the evoked potential known as the P300 (named as this in reference to its positively charged response occurring 300 milliseconds after a stimulus is presented) was associated with the allocation of cognitive resources for a given task. Genetic bases of intelligence are relevant as well since these reflect "hard-wired" aspects of universal-level processing. Although a highly controversial subject, there is evidence to suggest that a significant amount of general intelligence may be accounted for by genetic makeup (Jensen 1982b). (The nature versus nurture debate underlying intelligence is one we choose to avoid lest we diverge from our primary focus in this book.)

At a universal-level, declarative and procedural knowledge are highly abstract and general. Universal-level knowledge is inherent to the individual, and not merely a product of personal experience. However, universal-level knowledge is not unchangeable and extreme circumstances (such as physiological damage to the brain) can influence these knowledge categories at a universal-level. (This type of extreme example is depicted in the movie *Memento*, in which the protagonist has lost his ability to store recent memories after a traumatic experience. He can remember his life and experiences prior to an attack, but he cannot retain any subsequent memories. This form of memory impairment is rare but does occur.) Experience cannot create a process where one is absent; however, a number of psychological processes can be improved on with the correct environment. For example, proper nutrition can help to ensure that the existing psychological processes are operating fully and excessive stress will overload a system and slow down other processing.

Psychological universals represent declarative knowledge at a highly abstract level. All people have abstract categories of person-perception and self-concept (Epstein 1973). These categories include features stored in an existing mental structure, such as a schema. The depth, breadth, and complexity of these categories vary across individuals, but each person has memory schema possessing these dimensions. Moral values are universal as well according to some scholars (Wilson 1993). If so, these universal values would constitute declarative knowledge at a universal-level. How one should treat self and others, views of justice, fair allocation of resources, and duty to others are possible universal values. (We are not suggesting that people universally endorse the same allocation system for resources, merely that all people have a concept of fair allocation.)

Procedural knowledge at a universal-level refers to the routines that individuals have for processing information they receive. We are talking about how a person processes and comprehends new information as well as guides his actions and reactions to situations. Procedural memory stores sequences of actions; in the case of universal-level procedural knowledge, routines that people have for processing information such as storing new memories or categorizing experiences (Wyer and Srull 1980). This is much like what Wyer and Srull (1980) called an "executor," or a construct whose function is to store, move, and retrieve information. From our perspective, all people have this universal-level of declarative and procedural knowledge, but people vary in their capacity to store and process this knowledge. A person with high CQ has a greater capacity to store and categorize new experiences than a person with low CQ even though both have this universal capacity.

At a mediate level, procedural and declarative knowledge reflects more culture-specific information and characteristics. We deal with more emic considerations at this level of analysis since we are focusing on cultural characteristics and culture-specific encounters. For example, a person arrives into a new culture and she sees the airline personnel all wearing white cotton gloves (as is done in Japan's Narita airport) as they handle baggage, route buses, and so on. What is the purpose of wearing white gloves? Information is processed to understand the significance of the white gloves. Is there a concern about contamination? Is there a concern about communicable diseases? Is there a norm of cleanliness? Procedural knowledge guides information search of specific declarative knowledge concerning past encounters with cultures emphasizing cleanliness, xenophobia, and so forth, in an attempt to bring into memory information useful in the white-glove mystery. This gives rise to further processing at yet a more specific level (proximate level) to understand the significance of gloves at this airport for this airline employee. At a mediate level, one draws from one's shared experiences within one's culture as a general lens for viewing and understanding this situation. Our visitor asks herself, why do airline employees wear white gloves? She draws from various emic areas of declarative knowledge that is unique to her culture (as well as universal knowledge if it is available) to address this question.

To formulate an answer she uses setting-specific procedural and declarative knowledge to deal with the uniqueness of this situation. That is, the specific setting that she is operating in largely influences her use of particular procedural routines as well as the declarative knowledge from which she draws. In the case of an airport attendant wearing white gloves, she seeks collaborating cues to form a hypothesis that might explain the use of white gloves by airport personnel. For example, she hypothesizes that the Japanese are fearful of disease, so gloves are worn to fend off biological contamination. To assess this, she turns to her past experiences at airports, encounters with Japanese students and colleagues, prior visits to Japan, and so on, and ultimately forms an impression based on this information combined as a judgment. This judgment may give rise to an action and reaction to the attendant.

The specific reaction and processing of this intercultural encounter is the product of information processing and integration at many different levels of processing. At a universal-level, she deals with the encounter by processing the events, categorizing the information, and storing it into general person construct categories. These categories include features such as human versus inanimate object, as a general sense-making concerning the nature of people, and their function and role. At a mediate level, she processes the encounter within the context of what she knows about Japanese culture and norms. She draws from her existing memory concerning Japan and the Japanese people. At a proximate level, she processes the encounter as why this particular person is wearing gloves, the attendant's reaction toward others, whether all attendants are wearing gloves, how she feels about his wearing gloves on this given day, the ambient temperature, and a multitude of additional setting-specific cues. This is not merely moving information around in a mechanistic fashion. Her likes, dislikes, preferences, and subjective/emotional experiences influence how she processes information and what information she attends to (Earley and Francis 2002; Lazarus and Launier 1978; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997).

In summary, the process aspects of cultural intelligence can best be conceived as operating at different levels of analysis and consisting of declarative and procedural knowledge. They operate at three levels: (1) universal-level—processes and knowledge for general processing of a universal conception of humanity; (2) mediate-level—processes and knowledge that are culture-specific; and (3) proximate-level—processes and knowledge that are specifically tied to the context, people, and timing of events.

## SUMMARY

A skeptic might inquire why another model or type of intelligence is needed at this point in the development of the scholarly literature. There are several reasons: the vast majority of frameworks for the study of intelligence focus on the cognitive aspects of information processing, response latencies, logical reasoning, and so on (Sternberg 1988, 1997). This is true despite the shift toward facet models of intelligence (H. Gardner 1983, 1998; Mayer and Salovey 1993, 1995; Sternberg 1988, 1990). Considering that a faceted-model approach dates back to the early 1900s by Thorndike and others, it is surprising that relatively few models have been posed and tested until the last two decades. More relevant to our presentation, it is very surprising and unfortunate that attempts to deal with Berry's cultural relativism critique of the field (Berry 1974) have been largely absent. From an organizational perspective, this abstention is critical given the rapid rate of globalization experienced by businesses.

Another surprising absence from the literature is a focus on the capability of people to adjust to new cultures. Hence, this gives rise to the focus of our treatise. We are committed to understanding what is involved in a person's adjustment and understanding of a culture foreign to them. Why is it that some people adjust to new cultures, understand the existing practices, and can behave appropriately and effectively while others flounder? Our anecdotal and preliminary empirical evidence suggests that this is not merely an issue of emotional intelligence, empathy, social intelligence, practical intelligence, tacit knowledge, and so forth. A new cultural encounter is unique in that the cues and information relied on from past experience are largely absent or misleading. Many times the actions and apparent intentions of others are so unexpected as to appear bizarre and random. A person with high CQ has a capability to encounter such a situation and comprehend, persevere, and act in such a challenging context. This type of adjustment requires a complex set of processes governing procedural and declarative knowledge for a person to be effective in their intercultural dealings with others.

Our model has three general facets constituting CQ: (1) cognitive, or specific knowledge that people are able to gain and comprehend about a new culture based on various types of cues provided; (2) motivational, or one's propensity and commitment to act on the cognitive facet as well as persevere acquiring knowledge and understanding of a new culture and overcome stumbling blocks or failure; and (3) behavioral, or the capability of a person to enact his or her desired and intended actions to a given cultural situation. Lacking these three facets means that a person is lacking in cultural intelligence. Thus, our facets constitute more than a cognitive framing of intelligence—CQ requires that an individual observe, comprehend, feel compelled to react/interact, and implement action.

In addition, we described a general process model having three levels of abstraction for the use of procedural and declarative knowledge that is used in dealing with new cultures. At the highest level of abstraction are the universal-level processes that people use for basic information categories and processing about others. Processes such as attending to the situation, storing or recalling memories, integrating new information with existing knowledge, and forming general reactions are examples of universal-level processes. At a mediate level, processes reflect the use and development of cultural knowledge. That is, it reflects how one's own culture is a lens for understanding other cultures as well as the development of general rules for a new culture. Finally, at a proximate level are processes for dealing with each new situation uniquely. This setting-specific approach requires that a person integrate new information with often inconsistent cues about something that they witness in a new culture.

These processes related within levels with procedural and declarative knowledge influence one another. One's specific experiences in a given culture and situation ultimately influence how one perceives broader issues of human identity. That is, experiences accumulated over time help form general categories of identity definitions as well as culture-specific ones.

# 4

# COGNITIVE BASIS OF CULTURAL INTELLIGENCE

You must unlearn what you have learned.
—YODA IN 'THE EMPIRE STRIKES BACK'

The concept of cultural intelligence contains several features, but perhaps the most critical is the ability to construct innovative ways of conceptualizing, data gathering, and operating in a new culture. In this epigraph from one of the Star Wars movie sequels, the Jedi master, Yoda, is instructing his new student about the need for his preconceptions to be set aside so that entirely new ways of conceptualizing the world may be developed. Although certainly not an original, the significance of an intellectual rebirth is central to a person's adjustment in a new cultural context.

The nature of cultural intelligence from a cognitive perspective may be explored through three basic questions asked when a person attempts to understand a new culture. First, What are the ways that I can determine what I am like and what might someone else be like? This reflects the metacognitive rules and strategies that a person uses to understand a new cultural setting. A few different types of reasoning and decision making are important for cultural understanding, notably how reasoning and decision making differ across cultures as well as how reasoning and decision styles might be used to develop a cultural map of other people. Reasoning provides an answer to a second question, What is this person like and why are they this way? Finally, across several cultures the nature of the self-concept in a social setting and its construct differ. Although the content and structure of self-concept differ by culture and individual, the elements that make it up do not. This commonality of elements provides a starting place for understanding people in another culture. Our focus on both the self-concept of people and role identity addresses a final question, What can people be like and why? We explore this question using social cognitive and role theory as a way of describing a person's cognitive organization of self and social information.

The action of moving across cultures is a difficult and challenging one. It requires a degree of adjustment and adaptation that is not found in any other type of social interaction because so many aspects of the new situation differ from prior ones. To make things more difficult, many of the rules that we learn in one (or more than one) culture may not be useful in a new culture. In fact, many of the lessons learned in one culture will often interfere with successful adaptation in a new culture. Cultural adjustment is a bit of a moving target and requires a set of highly complex cognitive (and metacognitive) skills.

This adjustment is not merely an issue of developing expertise for a new social domain, as would be the case crossing settings within a culture. Expertise implies an acquisition of knowledge germane to a particular problem domain that is setting specific (Sternberg 1998). Cultural intelligence captures cognitive content and processes that have setting-specific aspects, but it is not limited in such a specific fashion. Following Sternberg (1998), expertise refers to a person having a number of characteristics in a given domain including: (1) rich and complex schemata concerning the problem domain; (2) well-organized and interconnected knowledge stored in these schema; (3) spending significant time in determining the nature of a problem (its key characteristics and description) as well as searching for potential solutions to the problem; (4) developing sophisticated views of problems so that generalizations across similar problem domains can be generated; (5) working progressively from given information to implement existing strategies; (6) having knowledge structures that incorporate procedural information relevant to task completion; (7) showing efficient use of time relative to less experienced decision makers; (8) high self-monitoring skills for strategy and behavior regulation regarding the task; (9) having routinized various aspects of task completion over time; and (10) showing greater accuracy than novices in generating appropriate solutions. (With the exception of points three and eight, these various points of expertise do not require the types of skills that we argue are central to cultural intelligence. Points three and eight do, however, require a level of processing that is clearly consistent with cultural intelligence, although neither one involves [necessarily] the generation of entirely new knowledge to suit a cultural context.)

Expertise may capture some of the metacognitive processes involved in cultural intelligence, but it does not overlap entirely with it. The acquisition of expertise may consist of several phases, such as exposure to instruction concerning the specific task or relevant role models (Bandura 1986) and actual experience with the task itself through practice, mental rehearsals and practice, and direct reinforcement for successful task completion. In contrast, cultural intelligence describes a potential to develop expertise in a new culture rather than the content of the expertise per se. In this sense, cultural intelligence refers to a capacity involving a number of metacognitive skills and processes.

An expatriate manager from France is sent to run a car assembly plant in China for a French automobile company. The company has opened recently a factory in Guangdong province just outside of Guangzhou in the south of China. Although the facility boasts modern equipment (much of which was sent directly from Europe and installed by French technicians) and the Chinese personnel have been trained by expatriate engineers (primarily French with some Australians) performance at the factory is lagging behind the standards set by comparable factories in Europe. The expatriate, Monsieur Cocteau, arrives to China and begins his work at the factory. He is an experienced manager who was responsible for the successful set-up of two other factories in France and has a long tenure with the company. His training, engineer with a business degree from ESC, suggests that he is an ideal choice for the assignment.

Cocteau calls a meeting of his immediate assignees in the factory (Chinese managers being "groomed" by the French company). At this meeting, he describes a thorough and well-thought-through plan for enhancing productivity at the plant, focusing on technical and operational improvements. After presenting this plan he solicits feedback from his subordinates who are highly supportive of his proposal. The new plan is implemented during the following months and plant productivity is reviewed after six months. Cocteau finds that productivity has not responded at all to the newly implemented plan. Puzzled, he calls together his staff and queries them as to why this might be. His staff members suggest several possibilities concerning the problems experienced in the plant. He follows this meeting with an additional meeting of just his two immediate senior managers to see if a more candid discussion can bring forth new ideas. Again, the two managers have little to contribute and suggest that the problem may be some technical problems on the assembly line. Again, Cocteau devises additional technical improvements in work flow and supply movement and implements the new changes at a significant expense for the factory. After an additional six-month review, productivity has actually fallen further. Frustrated and facing defeat, Cocteau returns to France and a new manager is sent to replace him.

The dilemma faced by Cocteau is not atypical of the challenge faced by an expatriate manager. The solution to this problem, not at all simple, reflects the problem with Cocteau's existing approach as a manager. As Sternberg and his colleagues describe in their work on tacit knowledge and practical intelligence (Sternberg 1988, 1997; Sternberg et al. 1999), much of the expertise used by managers is tacit and relatively automatic (Shiffrin and Schneider 1977). In the case of Monsieur Cocteau, the problem he faced was the classic dilemma of a functionally trained professional (engineering) attempting to deal with a problem space having other critical parameters that might be overlooked. In this specific example, the first author met with a number of Chinese senior managers at this plant roughly a year after the repatriation of Cocteau. His replacement had been much more successful (a French expatriate as well). The difference between the two managers was chiefly one of human resource management. The core of the problem experienced in the factory was neither technical nor did it involve the senior staff. The problem was tied very strongly to the rather large, and impatient, support staff of technicians and engineers from France who had been sent to train and supervise the "inexperienced Chinese workers." The Chinese employees resented the abrupt and impolite style of the French technicians who often refused to speak in English (the common language between the two groups) and who tended to keep to themselves during work breaks and lunch. The low productivity reflected a generally low level of motivation because the Chinese employees lacked commitment to the factory and the company. Further, this incident occurred shortly after the significant opening of Chinese markets to the outside world (early 1980s) under Deng Xiao Ping.

The functional fixedness and mental sets used by Cocteau to deal with a primarily people-oriented dilemma reflects a difficulty often faced by an expatriate manager having great expertise within a given functional area. Cocteau was a highly successful manager in France and had gained expertise in the specific duties that he was assigned to complete in China (troubleshooting factory productivity problems). However, the expertise (be it tacit or explicit) he had acquired was not transferable to China. His modest level of CQ is reflected by his inability to generate new approaches to conceptualizing the problem space around him in this new cultural setting. Having received negative feedback concerning the initial improvements, he continued to improve on and implement a strategy that was not appropriate for the "real" problem. His routines for assessing information concerning the actual work environment were ineffective, and he was unable to adjust them or create new ones.

## OVERVIEW OF CULTURE, CULTURAL ADJUSTMENT, AND INTELLIGENCE

### Basic Concepts Revisited

Rohner defines culture as "*the totality of equivalent and complementary learned meanings maintained by a human population, or by identifiable segments of a population, and transmitted from one generation to the next*" (1984, 145; emphasis in original). The cross-generational transmission of cultural meanings within a society may be imperfect, such that over time individuals acquire variations on cultural meanings held by their predecessors. Cultural meanings are typically not shared uniformly by an entire society, and they are not shared precisely. Thus, any two individuals from a given culture may hold slightly different meanings for the same event or construct, though these two individuals may have shared meanings with other parties in the society but not with one another.

From our perspective, culture is best viewed from a holistic perspective reflected by metaphors, ethnographic description, and so on, rather than a piecemeal approach using specific cultural values and syndromes. The challenge facing someone concerning cultural adaptation is that a new culture does not present its features in a piecemeal fashion. In a sense, our argument parallels that presented by Sternberg and his colleagues (Sternberg 1990, 1997) in a discussion of practical intelligence and how it differs from a traditional view. Sternberg differentiates academic (traditional) from practical intelligence as:

> Practical problems, in contrast to academic problems, tend to be (a) unformulated or in need of reformulation, (b) of personal interest, (c) lacking in information necessary for solution, (d) related to everyday experience, (e) poorly defined, (f) characterized by multiple "correct" solutions, each with liabilities as well as assets, and (g) characterized by multiple methods for picking a problem solution. Given the differences in the nature of academic and practical problems, it is no surprise that people who are adept at solving one kind of problem may well not be adept at solving problems of the other kind. (Sternberg et al. 1999, 17)

Notice that practical intelligence deals with problems that are poorly defined and not easily optimized as well as reflecting strategic multiplicity. The types of problems that cultural adjustment entails reflect many of the features described by Sternberg. Cultural adjustment requires additional features not reflected by Sternberg's conceptualization of practical problems, such as generating new conceptions of the problem (not merely reformulation), poorly or well-defined but ambiguous given the perceiver's frame of reference, and so on.

So what do we mean by intelligence in the context of CQ? If we draw on Sternberg's definition of practical problems, cultural adjustment is seen as a person's adaptation and shaping of novel cultural environments so as to perform a given set of duties. The various aspects of cultural adjustment and adaptation have been of central interest to organizational scholars for a number of years. Early research on international organizational behavior focused on expatriate selection and training issues (Black, Mendenhall, and Oddou 1991). This work is reflected in a number of "classic" studies, such as Tung's work on expatriate HR systems (1981b). Based on a review of eighty American multinational corporations (MNCs), Tung grouped the criteria for expatriate success into four general areas, including technical competence on the job, personality traits or relational abilities, environmental variables, and family situation. She went on to identify subsets of these four areas for a total of eighteen specific criteria used for selection. Among these, relational ability was identified as very important and central to an expatriate's success, although only a small number of companies in her study had formal procedures to assess it.

Our purpose in focusing on these particular definitions is to highlight the nature of CQ in relation to traditional definitions and approaches. Further, we focus on the aspects of cognition in common to these definitions and CQ. These various definitions are found in an edited volume by Sternberg and Detterman (1998) entitled, *What Is Intelligence? Contemporary Viewpoints on its Nature and Definition.* Das defines intelligence as "the sum total of all cognitive processes, entails planning, coding of information, and attention arousal. Of these, the cognitive processes required for planning have a relatively higher status in intelligence" (1994, 55). Detterman (in Sternberg and Detterman 1998) defines intelligence as a "finite set of independent abilities operating as a complex system" (1998, 57) and argues from an empirical view that intelligence is the set of measures predicting academic achievement. This rather narrow perspective captures much of the sentiment expressed by a traditional perspective on intelligence. In a similar fashion, Jensen defines intelligence in terms of g, a general factor derived from many different tests of cognitive ability when subjected to a factor analysis. This *general* factor has been found to account for a surprisingly large amount of variance in various measures of academic achievement (Jensen 1982b, 1993).

In reaction to the reductionist and absolutist perspectives expressed by traditional work on intelligence, a number of critics have voiced alternative definitions of the construct. Probably the most prominent and long-standing critic of research on intelligence is John Berry, who argues that existing work on intelligence fails to capture the essential richness of a cultural context. Berry suggests that the existing definitions of intelligence are largely Western, overly restrictive, and tested typically using Western methods having dubious value in non-Western cultures. He suggests that intelligence is best considered to be "adaptive for the cultural group, in the sense that it develops to permit the group to operate effectively in a particular ecological context; it is also adaptive for the individual, permitting people to operate in their particular cultural and ecological contexts" (1992, 35) Similarly, Pellegrino defines intelligence as a general concept capturing variations in quality of response to given situations as defined by the values espoused within a culture (1994, 113). He suggests that covert psychological processes, such as learning, reasoning, and adaptation, are reflected in one's overt actions. These processes themselves are differentially valued and experienced depending on cultural background.

The definitions of culture offered by Berry and Pellegrino seem to capture the difficult nature of understanding intelligence in a cross-cultural context. As we defined it earlier, cultural intelligence refers to a person's capacity to adapt effectively to new cultural contexts. This definition does not lend itself readily to the rigorous measurement advocated by scholars such as Jensen or Eysenck, but we provide some initial development of a psychometrically sound assessment tool later in this book. Our point is that an assessment of cognitive abilities using Western instruments is insufficient to understand and predict those individuals who are able to adjust readily to new cultures. The type of radical cultural relativism that Berry (1974) discusses reflects our view at a particular level of specificity. Referring back to Figure 3.3 in Chapter 3, the relativism described by Berry reflects differences in the construct of intelligence at the cultural and setting-specific levels of our diagram. We suggest that there are etic components of intelligence at the highest level of abstraction, but this is an aside for the central thesis of our book. From our perspective, cultural intelligence reflects a capability to gather and manipulate information, draw inferences, and enact actions in response to one's cultural setting. Such a definition does not require an assumption of relativism. However, as the relativists might easily argue, our position presumes that gathering, manipulating, and formulating inferences is a culturally desirable thing to do. In a closed and isolated community, such a set of capabilities may be entirely unnecessary and, therefore, not likely to be defined as "intelligence."

In summary, common definitions of intelligence highlight a number of the critical features emphasized in our model. Intelligence is a culturally delimited construct with its significance only fully understood through an emic analysis. The metacognitive processes underlying CQ are universal, but their manifestation and implementation are not. Thus, we need to focus on both the emic and the etic to understand how CQ functions and operates as people adjust to new cultures.

## BASIC COGNITIVE STRUCTURE OF CULTURAL INTELLIGENCE

### Basic Elements

Our model consists of three basic elements: cognitive, motivational, and behavioral systems. The cognitive system refers to all of those processes and aspects traditionally captured in definitions and models of intelligence, such as knowledge content, cognitive processing, and so on. From a cultural intelligence perspective, there are several aspects of cognition that are fundamental to understanding CQ, and these are depicted in Figure 3.3 in Chapter 3.

The various features of cognition that we highlight in our discussion are metacognition, declarative versus procedural knowledge, reasoning (inductive and analogical), and social perception related to reasoning (for example, fundamental attribution error, styles of reasoning, priming influences). We have focused on these particular topics because they are critical to the type of cognitive processing required for CQ.

We begin our discussion by looking at how people store, process, and retrieve social information that is fundamental cultural interaction—operating and acting on situations and information of a fundamental social nature. At this early point, we are not yet focusing on the social nature of information processing relative to CQ using self-schema and role theory.

In Chapter 3, we used a social cognitive framework for describing the filtering process that a person goes through as he seeks to understand a new cultural setting. Drawing on social cognitive, self, and schema theory, we described how the self-knowledge and schema of an individual shapes how he or she faces the social world. We will return to this approach when we discuss CQ in relation to social perception, but first we turn our attention to fundamental aspects of cognitive functioning, beginning with metacognition.

## Metacognition and Cultural Intelligence

The field of cognitive psychology has developed in a number of important ways during the last thirty years, and one of those avenues is referred to as metacognition (Flavell 1976, 1979, 1987). The concept of metacognition is straightforward but with tremendous underlying complexity and potential for explaining variation in cognitions across individuals (Hacker 2001). Put simply, metacognition refers to thinking about thinking, or knowledge and cognition about cognitive objects (Flavell 1987). Metacognition can be further broken down into two complementary elements: metacognitive knowledge, and metacognitive experience. Metacognitive knowledge refers to one's acquired world knowledge that has to do with cognitive matters, and it reflects three general categories of knowledge (Flavell 1987). First, it reflects the person aspects of knowledge or the cognitions that we hold about people as thinking organisms. There are three types of person categories: intraindividual, interindividual, and universal. An example of an intraindividual metacognition is a person's belief that he or she is good at dealing with numbers and analysis but not with people. An interindividual metacognition refers to an assertion about another person's capabilities (for example, thinking that one's spouse is very good at problem solving and strategic thinking). Finally, the universal form of metacognition knowledge refers to what we termed earlier as etic aspects of knowledge (for example, knowing that people make mistakes in their judgments or that memory is fallible). These etic-level forms of knowledge are derived in all cultural contexts. The construct of metacognition itself is an etic such that members of all cultures have a sense of knowing and consciousness about their own thoughts.

The second type of metacognition refers to task variables, or the nature of the information acquired by an individual. A person learns things about how the type of information encountered influences how it should be dealt with in various contexts. Many people realize that very densely packed and unique information requires a great deal of effort to comprehend. If such information is encountered, then a person spends more time on trying to acquire the information. Other information is more loosely packed and of a less challenging nature, so it does not require such an investment of attention for its comprehension. Thus, one learns that the task demands across situations vary considerably and that these demands must be considered in dealing with new circumstances. Using a cultural adjustment example, the demands placed on learning about a new culture that shares little in common with a sojourner are great and a person knows that much attention and persistence is required. However, this is not always such an easy thing to understand and apply across cultures.

For example, a colleague whose job at one time involved preparing expatriates for work assignments in India commented on the challenge facing such expatriates. He commented that these expatriates faced three differing types of interactions across time. At first contact, an expatriate's adjustment is relatively easy despite the formidable demands of the environment placed on her. Indians tolerate inappropriate behavior because they can understand the foreigner's difficulties in a completely new and strange environment. This is why they don't expect her to behave and react adequately in this early contact period. Indian norms of hospitability command them to treat the foreigner as a guest during these first weeks, even if she behaves somewhat "strangely." However, this presents a different type of adjustment challenge. An expatriate working in India may assume that life in India is not nearly as difficult as she was led to believe. After several months, however, the situation becomes more difficult because Indian colleagues no longer buffer her as they once did since they assume that she has had sufficient time to adjust to the rigors of life in India. The problem, of course, is that she has been buffered and led to believe that everything she is doing is acceptable and approved of by the locals. From the Indian perspective, the colleagues are wondering why after all this time she still does not seem to be adjusting to the new setting. Finally, a third phase is entered into, for which her Indian colleagues do nothing to buffer and they place high expectations on her capability to get things done since she has been operating in India for a long period of time. At this point, the expatriate is overwhelmed by failure and inefficiency while being somewhat bewildered as to how things could have gone wrong!

From a task perspective, the metacognitive demands of adjusting to the new information presented in her new assignment were not high because the Indian colleagues acted as an external filter. This led the expatriate to adopt particular cognitive strategies that would prove inadequate as time progressed and the external filtering/buffering by colleagues waned.

The final aspect of metacognitive knowledge refers to strategy variables, or the procedures used to achieve some desired goal. Whereas a cognitive strategy might be something such as adding a set of numbers to attain a total, a metacognitive strategy might be to add the numbers up several times to ensure that the total is correct. The original addition procedure gives a "correct" answer to the problem but the successive checks on the total function differently. The follow-up operations are intended to reassure that the correct answer has been found. Another example is that if one is exposed to very complicated reading material a strategy might be to read the material slowly to understand it. However, a metacognitive strategy would be to skim the material briefly to decide its difficulty and what cognitive strategy might be employed to master the material most effectively. This type of metacognition might well be thought of as a strategy for "learning to learn," and some people refer to it as metalearning (Schraw and Moshman 1995).

Our example of the expatriate working in India shows that all three types of metacognitive knowledge interact with one another. First, the expatriate uses her knowledge of her personal capabilities (intraindividual person knowledge) to regulate her efficacy concerning engagement across cultures. Similarly, she uses her knowledge of others as she gets to know them and judge their dependability as key informants concerning India and the local work environment. Second, she uses her past experiences in dealing with other cultural settings (perhaps on prior expatriate work assignments) to judge the amount of time and effort she needs to be allocated to understanding the local situation. She may use her past experience in similar cultures as a way of deciding how much time she needs to invest in learning Indian culture. Third, the strategy(ies) that she uses in mastering this new cultural setting reflects her past experiences and present objectives (cognitive strategy) as well as her sense of what approaches seemed to be effective in the past and why they may or may not be useful in this new context (metacognitive strategy). For example, if her only prior expatriate assignment was moving from her native country of Germany to Austria, then she likely realizes that many of her specific adjustment strategies will not be terribly useful in this new assignment. However, some of the strategies that she uses to facilitate her adjustment might well be applied in India despite its dissimilarity with Austria. For example, she knows that her adjustment to Austria was facilitated by her knowledge of the language. She does not know the local language spoken in this part of India but she knows that knowledge of a local language can be helpful for personal integration into the culture. Further, she appraises her ability to learn a new language as high, so she opts to take a language course in Hindi for this assignment. The metacognitive strategy that she employs is one of language preparation generalized from her prior assignment in Austria (where she did not have to take any language training but she realized that such a skill is useful for integration into the local culture).

This example illustrates several important points concerning the cognitive dimension of cultural intelligence. First, metacognitive knowledge is *not* the same as declarative and procedural knowledge represented at three levels in Figure 3.3, in Chapter 3. Metacognitive knowledge can operate at any of these three levels of our framework (universal, culture, setting). However, the implications of metacognitive knowledge at these three levels differ. Second, the components of persons, tasks, and strategies are necessarily interactive and should not be considered as if they are independent and isolated from one another.

Third, metacognitive knowledge is very useful for understanding the levels of analysis that we described in Chapter 3. We argued that information processing operates at three separate levels (universal-level, culture-level, setting-level), and metacognitive knowledge can be used to integrate the three levels. Metacognitive knowledge about persons, for example, reflects the etic that all people have a self-construal of identity (people everywhere have a sense of themselves and what differentiates themselves from others). Further, metacognitive knowledge of self-construal may be culture-specific (people in my culture have a sense of themselves and what differentiates themselves from others is how they view their identity in terms of family members). Finally, metacognitive knowledge of self-construal may be setting-specific (people in my social circle largely identify with a particular social icon such as Richard Burton or Elvis Presley). Thus, metacognitive knowledge can exist at any or all three levels of our information processing diagram (see Figure 3.3).

In addition to metacognitive knowledge, there are metacognitive experiences. Metacognitive experiences are conscious experiences that are affective, cognitive, and based on a cognitive activity. For example, a person is having a metacognitive experience if he has the feeling that something is hard to do or comprehend. Likewise, a metacognitive experience occurs if one has the feeling that a goal is difficult to attain or about to be attained. Another example of such an experience is a feeling of knowing how some setoff actions are likely to evolve. These experiences are very important in everyday life, and there is evidence suggesting that these experiences become more easily interpreted with age and experience (Flavell 1987). For example, Flavell (1987) described a study that provided young children with taped instructions concerning some operation (building and placing wooden blocks). In some cases, the instructions were straightforward and easily accomplished (for example, put the blue block on top of the red block). In other cases, the instructions were ambiguous, contradictory, or impossible to execute (for example, put the small blue block on top of the larger red block so as to cover it up completely). They found that when young children (5–6 years old) were given these inadequate or contradictory instructions they attempted to execute them but often expressed puzzlement. However, after performing the task and asked about the success of their actions, they reported that they were successful. It appears that they were not able to comprehend the metacognitive experience associated with attempting to execute an impossible or ambiguous set of instructions. As one ages and develops, one is able to make better use of these metacognitive experiences to interpret the social world. Thus, the adult uses the metacognitive experience gained by trying to implement an impossible set of instructions and infers that outcome is unlikely to have fully realized the intended goal.

There are theories concerning metacognition that are too numerous to describe within this chapter. (The interested reader should look at several sources including R. Brown 1987; Flavell 1976, 1979, 1987; Hacker 2001; Nelson and Narens 1995; Schraw and Moshman 1995; Weinert 1987; and Winne 1996.) One framework that is very useful for our approach was proposed by Nelson and Narens (1995), who argued that there are several basic elements of a metacognitive theory, including the model of the object itself represented at a metalevel, monitoring and control of flow between levels, and at least two separate but related levels of knowledge representing memory at multiple levels. They argue that a metacognitive model must meet a number of minimal requirements. First, cognitive processes must be broken into at least (and likely more than) two interrelated levels including a specific object level along with a corresponding metalevel representation. Second, the relation of one level to another is reflected in information flow. Taken together, the model must have cognitive events split into at least two interrelated levels and two kinds of information flow (control and monitoring).

Information flow represented in the Nelson and Narens (1995) model is reflected by two processes—control and monitoring. They use the analogy of a telephone handset to capture the distinction of control to monitoring. Control refers to the influence of the metalevel on the object-level (analogous to speaking into the handset); the metalevel influences the nature of the object-level by providing additional frames for interpreting what is going on at the object-level, but the metalevel is unaffected by the object-level through this "control" mechanism. Monitoring refers to the counterpart of control and is analogous to listening to the handset. Through monitoring, the influence of the object-level on the metalevel is evidenced. The model represented in the metalevel incorporates its monitored events into the metalevel models. Thus, there is a two-way exchange between the levels (or among them in the case of multiple levels) reflecting ongoing psychological events.

Nelson and Narens provide for the addition of many intervening levels (for example, the object at one level may operate as the model for a subordinate level and, hence, be both object and model simultaneously depending on the level of abstraction). This is useful for our distinction among the universal, culture, and setting-specific levels depicted in Figure 3.3. During monitoring, the metalevel uses information about the object-level. This information is used to update the metalevel's model of what is occurring at the object-level. This multilevel idea extends to as many levels as desired, but what remains crucial is that the relationship between any two corresponding levels is based on differing specificity of content and process. That is, metacognitive monitoring is not determined by an absolute ranking of levels; the critical feature is the relational aspect wherein some processes dominate others via control and monitoring. The boundary between the two levels may be sharp or fuzzy depending on the relational linkage.

Information is processed and cognized at three different levels (Figure 3.3) for CQ. At a universal level, information and processes are shared across all people. For example, people everywhere have a self-concept. This self-concept is a universal conduit through which information about the world is filtered and interpreted (Erez and Earley 1993; Markus and Wurf 1987; Markus and Kitayama 1991). A self-concept has a universal structure in that the self is differentiated from others. Much of the structure and process is culture-bound or setting-specific. For now, we are only referring to very general features, such as schemas having a structure of interrelated cognitions and processes to share these cognitions across multiple systems. As an example, the metacognitive framework that we described earlier is a universal one that operates in service of the self. We all have a concept of self relative to others that provides for at least some minimal level of differentiation. No person is so completely integrated into their social surroundings that they do not have at least some concept of self. This level of differentiation is the source of much debate and discussion. For example, Merton's (1968) concept of "anomie" reflects a dissociation of self from others that is maladaptive, while others argue that effective differentiation is a potential source of creativity and independence (Triandis 1995). Metacognition and associated processes operate at a universal level. For example, I not only realize that I am able to introspect about my reactions to a new situation and infer my own reactions (with some degree of success and accuracy), but also I am aware that others are able to do so as well.

Metacognition is reflected at a culture-specific level as well, although this has not been the focus of work by scholars in this field. That is to say, people from certain cultures possess metacognitive characteristics that differ from people elsewhere. Take, for example, the notion of high and low context (Hall 1959, 1976). The private and collective notions of self are shaped by the cognitive frames and influence how we interact with others (Erez and Earley 1993). In a high-context culture, people rely on many cues in their environment to understand and interpret events. These cues may be social, environmental, or, to a lesser extent, intrapersonal (Hall 1976). These social and environmental cues need not be direct and easily observed; high-context cultures use the nuances of social interaction—its content and symbolism—to understand a given situation. Individuals from a low-context culture focus predominantly on intrapersonal cues as well as direct and overt cues from the setting. For example, high- and low-context cultures influence the style of communication in conflict resolution. Individuals in low-context cultures are better able to separate the conflict issue from the person involved in the conflict than individuals in high-context cultures (Ting-Toomey 1985, 1988). In high-context cultures to disagree openly or confront someone in public is a severe blow and an extreme insult, causing both sides to lose face, in particular in the case of superior-subordinate interactions (Earley 1997; Ho 1976; Hsu 1985). Individuals in high-context cultures perceive the conflict situation as expressively oriented. For them, the conflict issue and the conflict person are the same, hardly separable from each other. Therefore, in high-context cultures individuals are supposed to engage in a normative process of reciprocal sensitivity toward one another. Persons in low-context cultures characterize conflict as primarily instrumentally oriented.

The rules for handling conflict differ across high- and low-context cultures. In low-context cultures there are simple and overt prescribed ways of handling conflict, and once they are mastered, conflict may be managed with relative ease. A potential for conflict is relatively high between individuals in a high-context culture because normative expectations of acceptable behavior are often subtle, complex, and easily violated (Erez and Earley 1993). Individuals in high- and low-context cultures learn different attitudes toward interpersonal interactions such as conflict management. In low-context cultures, characterized by an action orientation, people assume direct confrontation is desirable ("get things out in the open and deal with them"). In high-context cultures, people avoid direct confrontation, employing a calculated degree of vagueness, typically when tension and anxiety mount.

We would argue that the metacognitive content and processes of people from high- and low-context cultures differ systematically. Clearly, the emphasis on trying to ascertain others' intentions and moods from the cues they present vary according to a cultural-level construct such as context. An expatriate manager from Germany (low-context culture) working in India (high-context culture) asks his colleague if a certain project will be completed by the following week, and he is told "yes." The following week the German expatriate determines that the project has not been completed and asks why this is the case, to which his Indian colleague confides in him, "I thought that you understood that the way I said yes obviously meant no." This does not imply that the German's metacognitions are "poorer" than those of his colleague; the type of metacognitions of the German differ from those of the Indian as a function of cultural background (for example, high versus low context). In no way are we arguing that high- and low-context cultures differ in the quality of metacognitions, merely that they differ in focus.

Differing foci of content across cultures does not mean that the processes (control and monitoring) underlying metacognition differ, although this seems likely to be true. For high-context cultures, we would expect that the breadth of levels (Nelson and Narens 1995) differs as well as the type of levels drawn from. People from high-context cultures are likely to use a wider array of mental models having greater information complexity than their counterparts from low-context cultures. For example, high-context individuals may draw from inferences drawn about others in conjunction with the setting and actors using complex frames sensitive to subtle cues such as time of day, people present, type of interaction, work setting, and so on.

Metacognitions differ across what we refer to as the setting-specific level as well. This level refers to the specific aspects of interaction and captures the dynamic nuances of the setting particulars. There are at least two aspects to this level tied to the nature of the setting and the individual, unique capabilities of the actor. Put simply, some people are better than others at making sense of the world around them and using available information appropriately in some instances but not others. We develop differing capabilities to introspect across various circumstances.

Take, for example, the metacognitive phenomenon referred to as "ease-of-learning" (EOL) judgments. (The interested reader should refer to the metacognition for a greater explanation of this and other related phenomena such as "feeling-of-knowing," "judgments of learning," and so on). An EOL judgment refers to an inference one makes about how difficult it will be to learn something in the future. These judgments are predictions of what items will be the easiest to master or which strategies will make learning the easiest (Nelson and Narens 1995). In a study looking at individual differences in metacognition, Kelemen, Frost, and Weaver (2000) examined the argument that metacognitive accuracy reflects individual differences characteristic of metacognitive ability. That is, people may differ from one another with regard to their metacognitive abilities, but their accuracy of judgment should be relatively invariant across metacognitive tasks. Kelemen and colleagues found that although individual differences in memory and confidence were stable across tasks and time, metacognitive accuracy was not. This suggests that people's metacognitive abilities differ across time and task, and they are not stable across settings as often is presumed and metacognitive accuracy (for example, how my estimate that I can learn a new strategy for playing chess [EOL] predicts my actual performance of learning the new strategy) is not invariant across tasks. From our perspective of CQ, this also suggests that metacognitive abilities may vary within each individual but across setting-specific characteristics. Put concretely, my metacognitive accuracy for one task will not necessarily be predictive of my metacognitive accuracy for another task (for example, how well I can predict my likelihood of learning about the cultural taboos concerning male-female interaction in a given culture may not be strongly tied with my estimate of learning about the symbolic significance of food in people's everyday lives). Thus, metacognitions appear sensitive to the specific setting in which a person is operating and functioning.

Taken together, metacognition provides a nice general framework for understanding the linkages among the universal, culture, and setting-specific levels of information processing in our model. We can talk about metacognitions that operate at any of these three levels of analysis, and a person's insights concerning metacognitions at all three levels reflect CQ. At a universal level, it is important to know what aspects of metacognition are shared by all people as a basis for common and shared understanding. At a culture-specific level, knowledge of others' metacognitions helps to guide one's own comprehension of why other people act as they do. Finally, at a setting-specific level, awareness of metacognitive abilities is important not only to understand and predict another person's behavior but also to know one's own capabilities so as to account for personal weaknesses. Accurate self-assessments are very important for understanding personal motivation and efficacy. Awareness that metacognitive accuracy for individuals across the various tasks and settings they operate in is central to developing an effective and appropriate set of schemas to apply to them.

These metacognitive theories and abilities provide us with a general backdrop for understanding the cognitive aspects of CQ. Metacognitions are superordinate judgments that a person makes about his or her own thought processes as well as those of others.

## Features of Cognition: Types of Knowledge

In discussing the role of cognition in CQ it is useful to address the various types of knowledge that form the basis of "what we know." A traditional view (Schraw and Moshman 1995) suggests that cognition can be described by three general types, including declarative knowledge, procedural knowledge, and conditional knowledge (R. Brown 1987; Cohen and Bacdayan 1994; Singley and Anderson 1989; Tulving and Schacter 1990). In addition to these categories, some researchers talk about knowledge as fluid versus crystallized, tacit versus explicit, among others (Polanyi 1962; Sternberg 1997; Sternberg et al. 1999).

Declarative knowledge refers to knowing "about" things, while procedural knowledge refers to knowing "how to do" things. Additionally, cognition can refer to conditional knowledge or knowing the "why and when" of things. Briefly, declarative knowledge refers to knowledge about oneself, others, objects, and so on. It refers to the content of one's memory based on one's various experiences, and it captures the characteristics of one's environment. Procedural knowledge refers to knowledge of how to execute actions. Individuals with a high procedural knowledge often execute actions automatically and are more likely than others to sequence strategies effectively and use qualitatively better strategies than others. Conditional knowledge is a category that we did not discuss earlier in the process aspect of our model. It refers to knowing when and why to use particular cognitive actions as opposed to others and may be thought of as a variation on declarative knowledge (Schraw and Moshman 1995). By this, we mean that conditional knowledge captures the relative utility of particular strategies across various contexts.

These characteristics of knowledge are relevant to our discussion of CQ since this provides us with a way of understanding the type of knowledge that needs to be acquired by a sojourner. For example, tacit cultural knowledge refers to the unstated aspects of culture that are unstated while potentially very important. What makes this type of knowledge difficult to acquire is that key informants from a culture are not easily able to articulate it even if they desire to do so. The burden placed on an expatriate becomes greater than if declarative and procedural knowledge are ascertained through direct inquiry. Unfortunately, by its very definition, culture refers in part, to the unstated assumptions and practices within a society (Hofstede 1980). Thus, tacit cultural knowledge most often must be inferred by an expatriate through observation and personal interaction in the target culture.

Procedural and conditional knowledge share some of the challenges posed by tacit knowledge. Although people are able to describe the procedures that they use to engage the world around them, procedures are not as easily articulated as declarative knowledge since they may become automatic through repeated use (Shiffrin and Schneider 1977). This suggests that asking people directly about the procedures to do things in their culture may be problematic at times. However, from a sojourner's perspective procedural knowledge may be acquired by mimicking others (Chartrand and Bargh 1999) as well as through direct observation. Conditional knowledge requires that these procedures be used "at the right time," so it captures both procedural and declarative knowledge (for example, I am supposed to do "X" when one of my Chinese subordinates approaches me to ask a question, but I am supposed to do "Y" when one of my Chinese superiors approaches me).

Finally, declarative knowledge represents the most direct form of information for the expatriate. This type of knowledge is gained largely through observation of ongoing activities as well as by asking one's colleagues in a new cultural setting. Thus, we can use the example of riding a bus in London. I can ask my colleague what a bus ride is like in London (declarative), how to stop and board a bus (procedural), and when should I board the bus from the front versus from the rear (conditional).

The knowledge that a person has about his or her own culture as well as that of other cultures is based on various gathering tools such as observation of behavior. However, an additional approach is based on the content and style of reasoning and social inferences that people make in their culture.

## Features of Cognition: Reason, Decision-Making and CQ

The importance of reasoning and decision making for cultural intelligence is very high because a person's capacity to generate effective cognitive and metacognitive strategies for dealing with new situations in a foreign culture requires insights concerning self and other cognitions. Many studies confirm differences in the pattern and style of decision making and thinking of Western and non-Western cultures related to cultural values on social perception (Cousins 1989; Miller 1984, 1997; Nisbett et al. 2001; Shweder and LeVine 1984). For example, Chiu argued:

> Chinese are situation-oriented. They are obliged to be sensitive to their environment. Americans are individual-centered. They expect their environment to be

> sensitive to them. Thus, Chinese tend to assume a passive attitude while Americans tend to possess an active and conquering attitude in dealing with their environment. (1972, 236)
>
> [The American] orientation may inhibit the development of a tendency to perceive objects in the environmental context in terms of relationships or interdependence. On the other hand, the Chinese child learns very early to view the world as based on a network of relationships; he is *socio-oriented*, or *situation-centered.* (1972, 241)

This rather well-accepted notion of context sensitivity is well rooted in Hall's work that we described earlier (1976) as well as Witkin and his work on field dependence/independence (Witkin and Goodenough 1976) among other sources. More recent empirical and conceptual work following in this tradition is presented by Nisbett and his various colleagues (see Nisbett et al. 2001, for a review). For example, Masuda and Nisbett (2001) presented Japanese and American subjects with pictures of animated scenes of fish and asked the subjects to report what they had seen. As expected, the Americans generally focused on the focal fish in the scene whereas the Japanese subjects tended to focus on background elements. Further, the Japanese subjects tended overall to make more references to the background scene and relationships among elements within the scene itself.

However, the contrast of Eastern and Western thinking is not so simple as might be assumed based on the arguments of Nisbett and colleagues (2001). For example, in a comparative study between India and the United States, Miller (1984) found that Indian Hindus use more concrete and contextually qualified descriptions of people they know than Americans. She also found that Americans made attributions more according to personal dispositions than did Indian Hindus, who tended to attribute behavior to the situation. Yet, there were no significant differences between the two groups in tests of abstract thinking. This finding rules out cognitive deficit and strengthens the impact of indigenous cultural meanings. Cultural orientations such as individualism-collectivism may help to explain this result. Americans stress autonomy and self-reliance, whereas Indian Hindus view the person as related to others. Sociocentric cultural premises rather than a lack of abstract skills may be related to Indians' focus on interpersonal context and behavior.

Another intriguing case is that of Japan. Japan is comparable to Western societies in industrial and economic achievement. Moreover, Japanese students far surpass their American counterparts in the abstract fields of science and math, yet, their mode of thought is often described as concrete (Erez and Earley 1993). In view of the inconsistency, Cousins (1989) examined the role of culture as an alternative explanation for context-bound versus context-free perceptions of the self. Individualistic premises describe a person as a situation-free, discrete agent while sociocentric premises locate a person in relation to others. Cousins (1989) hypothesized that within a social context, Japanese people would be able to generate abstract concepts and to refer to personal dispositions. A finding of such responses, comprising abstract summaries of behavior across one's experiences in a social context, would support the idea that Japanese think abstractly about the self, given a frame of reference conductive to a sociocentric focus (Kitayama 1996, 1999; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997).

Returning to our earlier example of high- versus low-context cultures, we see additional evidence of culture's influence on decision making. In conflict situations, members of low-context cultures handle conflicts by using a factual-inductive style or axiomatic-deductive style more than members of high-context cultures. Low-context cultures tend to avoid direct confrontation (Erez and Earley 1993). For example, an executive in China is advised to solve a conflict between two subordinates by meeting separately with the two of them whereas in the United States, the supervisor is advised to meet jointly with the two sides of the conflict (Bond 1997; Bond, Leung, and Giacalone 1985). Similar results were found in comparisons between conflict resolution of Mexicans and Anglo-Americans (Kagan and Martinez-Romero 1982). Differences between high- and low-context cultures influence communication between superiors and subordinates as well. This approach can be seen in superior-subordinate relationships. In low-context cultures, superiors directly criticize a subordinate for poor quality of work, but in high-context cultures, superiors are very careful not to do so in public (Earley 1997) or with such directness that the subordinate's feelings will be negatively and directly impacted. For example, a North American supervisor is likely to say the following: "I cannot accept this proposal as submitted. You should come up with some better ideas" (Miyahara 1984). A Japanese supervisor would say: "While I have the highest regard for your abilities, I would not be completely honest if I did not express my disappointment at this proposal. I must ask that you reflect further on the proposal you have submitted to me" (Miyahara 1984, 9).

People from low- and high-context cultures differ in their style of argument. For example, Americans typically engage in the factual-inductive style of argument; Russians use the axiomatic-deductive style of logic; and Arabs primarily engage in the affective-intuitive style of emotional appeal (Glenn, Witmeyer, and Stevenson 1977). A factual-inductive style is based on facts and moves inductively toward conclusions; an axiomatic-deductive style proceeds from the general to the particular; an affective-intuitive style emphasizes emotional experience. An interesting example of the affective-intuitive style is reflected in a traditional method of judging guilt by the Druze people in the Middle East. According to tradition, if two disputants were brought before a tribunal each person's innocence truth would be tested by having them each put their tongue against a metal pot containing hot coals. The innocent man (person professing the truth) would not burn his tongue because his saliva would be flowing and it would protect him. A person lying would have a dry mouth, so his tongue would burn when it touched the pot of coals.

Non-Western cultures have been described as concrete in their focus on situation-bound behavior and social role rather than on abstract personality traits or dispositions (Cousins 1989). Such concreteness is usually ascribed to a cognitive inability of analytic thinking (Nisbett et al. 2001). Concreteness is the tendency not to abstract features of behavior from context and refers to a bounded aspect of perceptual stimuli. It is a tendency to perceive things as part of the real-life settings from which they derive meaning rather than isolating objects and generalizing across contexts based on conceptual similarities.

If it is important that interdependencies are observed in a given context, then it stands to reason that perceptual processing and information integration of the environment engaged in by individuals is central to CQ. Likewise, if it is important for individuals to find out an object's properties and to categorize them, then perceptual characteristics such as decontextualization of the object from the setting and categorizing the object's behavior into existing rules need to develop. As Nisbett and colleagues argue, "Such differential cognitive habits would, of course, be expected to become largely automatic and unconscious, just as the underlying naïve epistemology would be expected to be largely beyond the reach of conscious awareness" (2001, 295). Thus, they argue that the social organization experienced by an individual in his or her culture will influence the cognitive processes she develops.

Differences in categorization and inductive reasoning appear connected to cultural influences as well. Osherson, Smith, Wilkie, Lopez, and Shafir (1990) proposed a theory of inductive inference from categories. They argue that people's willingness to generalize across categories is a function of the category premise overlap that covers the lowest level of category. For example, if a person is told that a lion and a giraffe have a certain property then he or she is more willing to infer that a rabbit also has the property than if a person is told that a lion and a tiger have the characteristic. Nisbett and colleagues (2001) report that this category induction occurs to a lesser degree for East Asians than it does for Westerners. They argued that categories are less salient for Asians (Koreans) than they are for Westerners (Americans). Similarly, they argue that East Asians are less likely to use formal rules and categories for making judgments. East Asians prefer to group objects based on similarity and relationships. Americans, they conclude, are more likely to rely spontaneously on categories for purposes of induction than East Asians and are more likely to use formal, rule-based categories in making judgments.

Although this work reported by Nisbett and colleagues (2001) is highly innovative in a number of ways, one comment that we have is that the assumption that relationships are not categories is perhaps a bit misleading. For example, Chiu (1972) gave American and Chinese children pictures having various stimuli, including human, vehicle, furniture, tool, or food categories, and asked the children to group any two of the objects into a single group. The Chinese children were likely to group together objects based on a relationship basis rather than a category membership. For example, if shown three pictures consisting of a man, woman, and a child, a Chinese subject might select the woman and child justifying the grouping by saying that the mother takes care of the child. An American subject might select the man and woman justifying the grouping by saying that the two are both adults. It may simply be that the category being used by the East Asians is relationship-based rather than similarity-based. This need not suggest that categorization is not occurring, rather that the critical features defining categories differ across the two cultural groups.

We have focused a great deal on various styles of reasoning (for example, analogical and inductive reasoning) because they are a critical feature of CQ. Their significance comes in several forms. First, from a content perspective it is important to realize that people differ in their approach to reasoning to develop appropriate metacognitions concerning how and why they act and make the decision that they do. If a person from a strong categorical/analytic-reasoning orientation interacts with a person from an affective/intuitive-reasoning orientation she may be baffled by this person's reliance on intuition as a basis for making critical decisions. Further, as a person from a categorical/analytic orientation seeks to develop appropriate metacognitive schemes to understand a person from an intuitive/affective orientation she must realize that the self-referent processes of the other person may be completely different than the ones she herself relies on. For example, if one is dealing with people having a strong relationship/holistic perspective, then it is important to realize that objects will be categorized based on rules of inferred relationship rather than overt characteristics of similarity. As a sculptor was once attributed to have said when asked how he decided what to sculpt from a block of marble he replied, "I just chip away everything that should not be there."

A second critical feature of understanding reasoning in a cultural context is from a CQ viewpoint. That is, a fundamental requirement of the international sojourner is one of data gathering and construction of new social realities. Using the analogy from social sciences methodologies, a high CQ person has an intuitive grasp of a grounded-theory approach to theorizing. The foremost challenge faced by an intercultural traveler is observing, identifying, and creating cognitive and metacognitive strategies for dealing with a new culture. We will describe each of these from the perspective of the Nelson and Narens (1995) model that we described earlier using an example of a French expatriate manager who first ventures to China for his assignment.

Using the Nelson and Narens perspective we see that the object level refers to the actual experiences of the sojourner. Early on, this may involve a number of senses including tactile (for example, heat and humidity), visual (for example, masses of people), olfactory (for example, strong and novel odors), auditory (for example, high levels of noise from a variety of people and machines), and so on. The object level may be automatically limited as the expatriate attempts to deal with the sensory and information overload, although most of his information processing will be controlled at this point (Shiffrin and Schneider 1977). This processing at the object level may be very complex and entail a large cognitive strain for the person in terms of information-processing demands. The expatriate may invoke metacognitive strategies (for example, pay attention to any person talking to you who is recognized and identified, otherwise avoid eye contact) as well as specific cognitive strategies (for example, pay attention to the person talking to you) for handling information and sensory overload. These strategies may have proven useful during previous expatriate assignments (for example, visiting Indonesia) or other situations that are perceived as similar (for example, having gone to a highly crowded World Cup match in Paris).

More importantly, a person having high CQ will actively engage in creating anew, or modifying existing, strategies to deal with the new and unique aspects of her environment. She is able to incorporate her various cognitions to create new strategies as well as metacognitive strategies for the new context. It is not merely enough to take and apply existing metacognitive strategies (for example, in a new culture look to see which male talks the most to figure out who is the leader because the leader is an important person); a new culture may require a reformulation of existing metacognitive strategies (for example, talking a great deal reflects a person who is attempting to ingratiate himself to the dominant social actors so look at who is being talked to by others the most frequently). Knowledge of others' approaches to reasoning becomes critical in attempting to take the perspective of locals. Our French expatriate needs to consider that the Chinese reason with a strong emphasis on relational cues as a basis for groupings, so her attribution of actions needs to be derived from human relationships rather than place or time (Kelley 1973).

If we assume that cultural background influences the nature of one's reasoning, as Nisbett and colleagues (2001) suggest, then our French expatriate faces some interesting challenges in developing the cognitive and metacognitive skills needed to be effective in China. For example, these cultures vary in a number of ways, but both share a relatively strong orientation toward hierarchy, or power distance (Earley 1999; Hofstede 1991). The French expatriate may encounter difficulties if he fails to recognize that some similarities across the two cultures do not imply many similarities. After witnessing some sign of deference and subjugation of a subordinate to his superior, she will likely invoke schema and scripts consistent with a strong power orientation. However, the problem is that these script and schema are based on French, and not Chinese, culture. Additionally, the content of her schema may be inconsistent with those required in the new setting (for example, relying on technical and professional credentialing as a sign of status appropriate for France versus age and guanxi in China). Thus, the challenge that the expatriate faces with partial similarity is reflected in the famous quote referring to Americans and English as two peoples separated by a common language. Apparent similarity may lead to generalizations across multiple traits and domains.

Of course, if the French expatriate fails to recognize cultural similarity to the Chinese on a social order variable then her functioning within Chinese society will be impeded as well. Thus, cultural interaction requires that a person is able to understand the reasoning and thinking processes used in another culture and to use this information to create effective strategies for interaction. Further, metacognitive strategies for understanding oneself are critical so that potential overlaps (as well as conflicts) are identified and used to greatest advantage.

A great deal of what we have discussed to this point assumes that reasoning and inference based on social actors operates similarly to those reflecting other objects. However, this may be in error for a culture emphasizing a relationship focus in reasoning. That is, social and nonsocial objects are not treated comparably in various reasoning and decision-making contexts. High CQ requires that a person is keenly aware of the impact of his behavior, and that of others, in a social context. Further, he or she must be able to create new rules and strategies that are compatible with a given culture even if these strategies are inconsistent with existing ones or derived using a different system of reasoning.

## Social Perception and Cognitive Aspects of Cultural Intelligence

The self is an interpretive structure that mediates our interactions with others as well as our self-assessments (Gecas 1982; Markus and Wurf 1987; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997). Intrapersonal processes require cognitive information processing involving various cognitive and metacognitive events. Interpersonal processes reflect the interaction with one's social setting and require processing social stimuli, choosing interaction strategies and settings, and reacting to feedback. We described the cognitive function of CQ largely in terms of how people deal with their social interactions using Stryker's Role Identity Theory (1987). According to this view, separate identities are ordered in a salience hierarchy such that primary identities are more likely to be evoked in response to a given situation and identity salience is based on the individual's level of commitment to his social networks. Stryker defined commitment as "the costs to the person in the form of relationships foregone were she/he no longer to have a given identity and play a role based on that identity in a social network" (1987, 90).

Identity salience is influenced by the social context of an individual (Earley and Laubach 2000) as well as the cultural context of the individual actors, as expressed in their culture-related values. For example, a worker from a collectivist culture would tend to have a higher commitment to an identity that reflects the interests of her in-group regardless of its position. A person's role identities, social hierarchy, and face are strong determinants of how people process cues relevant for cross-cultural interaction. This implies that CQ requires a strong knowledge of how people from other cultures define themselves in a social context. However, such knowledge requires that an individual understand how people process information about themselves and others as well as how these general processes may vary across cultures and social settings.

Social cognitive models conceptualize the mechanisms through which information is processed, stored, and organized into a certain structure. Obviously, someone having high CQ is able to generate effective and accurate representations of others' social concepts. That is, high CQ means that a person understands the implicit theories that a target uses in dealing with the social world. Further, a high CQ person is able to integrate this information with self-referent information to judge how others will react to his own actions.

Cantor and Kihlstrom (1985) provide a useful framework for understanding the way that people process social-relevant information and integrate it into a self-concept. A person's self-concept is a mental representation of personality formed through both experience and thought and encoded in memory alongside mental representations of other objects (Kihlstrom et al. 1988). The various identities we hold form the structure and anchor the self in the social system. They suggest that social intelligence can be thought of as a constellation of declarative and procedural knowledge revolving around Kelly's general attributional criteria of persons, situations, and social episodes.

Knowledge of persons refers to the notion that people are categorized and referred to using multiple person schema based on various social groupings and role memberships (Brewer and Kramer 1985; Stryker 1987). Categorization occurs according to a wide variety of criteria and sources, including primary and inferred diversity characteristics (for example, gender, education, religion), social memberships (for example, member of Singapore Symphony Orchestra association), implicit traits (for example, good leader, conscientious worker), and so on. In defining social categories, most authors agree on making a distinction between attributes that are visible (age, sex, race, ethnic background) and those that are underlying (education, technical abilities, functional background, tenure) (Jackson, May, and Whitney 1995; Pelled, Eisenhardt, and Xin 1999; Pelled and Xin 1997). Readily observable categories include those attributes that people are born with and that are immutable. Inferred categories include those attributes that people acquire or are assigned and that are changeable. (If diversity is conceptualized as discrete categories, it can be measured quantitatively: for example, by determining the degree of dispersion of diversity categories in the team or the Euclidean distances between diversity categories of team members [O'Reilly, Caldwell, and Barnett 1989; Tsui 1998].) Research looking at how various types of information concerning people is combined suggests that people use a variety of categorization schemes including intuitive norms for person attributes and their covariation, affective information associated with attributes and with person types, and inferences based on intentions and goals that motivate behavior (Cantor and Kihlstrom 1985).

The second type of knowledge that people use in making assessments of others focuses on the situation in which participants are behaving. That is, there has been a reinvigoration of work done on situated cognition (for example, McAuley, Bond, and Kashima 2001), which looks at the role of the situation in determining a person's social concepts and interpretive rules for interactions. Knowledge of social situations represents an important feature for understanding a person's schema, scripts, and metacognitions. Settings are often defined in terms of the behavioral activities involved (for example, Barker's work on life in a small Kansas town), the types of persons in the setting, and the goals of the actors who inhabit the social setting. One of the things that people know about situations in their social world is the set of behavioral norms associated with different settings or interactions. People know the typical behavioral scripts needed for a situation, and these scripts help to define who is likely to be effective in a situation as well as the appropriate rules for the setting.

The third type of social knowledge described by Cantor and Kihlstrom refers to the information people have about behavioral episodes and social tasks that typify a person's interactions. This feature is organized around the dynamics of social life looking at the action-oriented characteristics of the setting. People use multiple schemes to organize the social episodes or tasks that consume their energies as mundane (or typical) experiences. However, they use higher-order (metacognitive) scripts that are more prototypic but general and that can be modified to capture the specific idiosyncrasies present. Episode schemes can be organized around various features, including basic motives, needs, domains of social life, or goal fulfillment.

Thus, we can think of knowledge of the social world as a collection of features organized into one's self-concept using a collection of schemas, prototypes, goals, or images that are arranged in a space (Sherman, Judd, and Bernadette 1989). Each schema is a generalization about what the self contains, such as descriptive information about traits, roles, and behavior, as well as procedural knowledge of rules and procedures for making inferences (Kihlstrom et al. 1988). A person's self-concept can be thought of as a collection of ideas and images concerning the state of an idealized and real world; most importantly, it acts as a filter for incoming information.

The self-concept is a conduit funneling various life experiences and assessing them for meaning. The self is not passive and actively interprets and reorients one's social experiences so that one can make sense of any given situation. This process of filtering social information is done through the self relying on general schema associated with persons, episodes and tasks, and situations. At this stage of cross-cultural research there is no compelling reason to reject the three general categories of knowledge that are used by Cantor and Kihlstrom (1985). However, there are at least two general areas that are likely to be culture-bound in their construction. First, the relative importance of these three knowledge categories is assumed comparable in the literature. (This statement is not strictly accurate since we have not been able to find explicit discussion of these criteria for social judgments in the cross-cultural literature. The discussion of social perception by Smith and Bond in their recent book on *Social Psychology Across Cultures* [1998] sheds some light on this topic.) However, it seems very unlikely that the three categories are comparable across cultural settings varying on dimensions such as collectivism or power distance. We argue that cultural orientation will have an impact on the relative weight assigned to these various categories so that people from a culture such as China, which emphasizes power and groupism, will place a higher emphasis on persons and situations than people from England (emphasizing moderate levels of power and individualism). In the latter case, episodes and tasks become more dominant with the emphasis on underlying dispositions and intentions of the actors involved. At least some evidence for this notion is presented in work on the fundamental attribution error. Miller (1984) looked at the attributions made by Americans and Indian Hindus. He found that Americans explained another person's behavior that had good or bad consequences generally in terms of good or bad underlying qualities of the person. Hindu Indians explained similar behaviors in terms of social roles, obligations, and other contextual factors. Contextual attributions were twice as frequent for Indians as for Americans, while dispositional explanations were twice as common for Americans as for Indians. Miller provided evidence that the culturally divergent attributional tendencies develop gradually through socialization. Thus, these differences in attribution were much greater for adults than they were for children. Similarly, Morris and his colleagues (Morris, Leung, Ames, and Lickel 1999; Morris, Nisbett, and Peng 1995; Morris and Peng 1994) demonstrated that causal inference differs across cultures. They looked at a shooting incident involving a Chinese Ph.D. student who shot and killed his advisor and several bystanders and a shooting involving a Detroit postal worker who shot and killed his supervisor and several bystanders. They analyzed newspaper reports of these incidents in Chinese and American newspapers, looking at the reasons attributed to the actors in each culture. They found that the Chinese accounts of the incidents speculated about the situational, contextual, and societal factors that might have contributed to the tragedies, whereas the American accounts focused on dispositional characteristics and mental instability of the killers. Interestingly, these differences in attribution were made regardless of whether the killer was of the same or other culture, so this variation in the fundamental attribution error was consistent within cultures.

This point should not be overemphasized because it suggests that some groups (East Asians) ignore dispositional information solely in favor of situational cues, whereas others do the opposite (Americans). Indeed, research on dispositions using Asian samples shows that they do indeed make reference to dispositions in various types of social attributions and social judgments (Smith and Bond 1998). For example, research on the "Big Five" personality factors (Bond 1997; Costa and McCrae 1992) demonstrates that East Asian samples pay attention to personality factors. The content and nature of these personality dimensions differ to some degree across cultures (Bond 1998, personal conversation), but this does not mean that East Asians ignore personality factors in making social judgments.

Thus, the structure of social knowledge may be common across various groups of people in a general form but the specific configuration varies dramatically. In East Asian cultures, self-concept is based largely on person and situation aspects of social knowledge organized in a hierarchical form with numerous interdependencies (Kitayama, Markus, Matsumoto, and Norasakkunkit 1997; Nisbett et al. 2001). In Western cultures, self-concept focuses on dispositional characteristics stemming from episodes and tasks as well as persons. The structure itself likely differs across the cultures with that of East Asians more strongly integrated based on relationship considerations than for Westerners. Furthermore, the relative prominence of particular features will differ as well. It is not that East Asians do not attend to dispositions of social actors—they rely more strongly on situational cues than dispositional ones (McAuley Bond, and Kashima 2001; Pervin 1989; Seeman 1997).

Another cognitive feature that differs across cultures is trait or feature accessibility. By this we are referring to the process in social cognition often called "priming," or making particular cognitive events or features accessible in memory (Wyer and Srull 1989). Although priming interventions are commonplace in social psychology and social cognition, they have not been explored extensively in a cross-cultural context. An interesting application of this approach was conducted by Chatman and Barsade (1995) in their use of priming constructs consistent with competition and cooperation. The authors looked at how priming these two orientations interacted with individuals' actions within an organizational context. In more recent applications of priming principles, Ho-Ying Fu and her colleagues (2001, personal conversation) have begun conducting studies looking at how cultural primes influence evoked scripts for action. This line of work shows great promise since it provides a fresh perspective to the study of culture from an individual's perspective. (At the same time, this work follows the lead provided by Triandis more than thirty years ago in his treatise, *Analysis of Subjective Culture* [1972]. In this framework, Triandis described the role of motivation and cognition as well as habits, values, and attitudes in relation to behavior in a cultural context.) It does, however, raise a number of questions relevant to CQ as well. For example, is a person with high CQ less susceptible to cultural primes? If a person is high on cognitive CQ this means that she is sensitive to the social setting and how to interpret its meaning. This might suggest that a high CQ person will respond more to a cultural prime since she will attend to subtle environmental cues. However, a high CQ person should be able to incorporate priming information into her existing self-schema and use it to construct a more complete picture of the social setting without succumbing to a simplistic, prime-driven worldview. The relation of cognitive CQ to priming cultural variables remains an open question.

The various cognitive mechanisms underlying self and other social inference suggest that the cognitive aspect of CQ needs to focus on the content of declarative and procedural knowledge as well as its structure and integration. For example, knowing that Chinese use relational categories in classifying social information is insufficient for understanding why situational cues are relied on for attributions. Similarly, knowing that the French use status markers such as technical knowledge and expertise does not inform us whether status is a key feature for organizing self-schema. A high CQ person requires a way of creating an implicit theory of how people from other cultures view themselves, integrate social information into their worldview, and account for various social interactions. Further, they need to have a way of making sense of another person's viewpoint from an endogenous perspective.

## SUMMARY

The metacognition literature describes the general procedures of how one acquires a new cultural perspective. That is, metacognition guides our awareness of our own self-conceptions and mental functioning. This is the first reference point for cognitive CQ, and it addresses the question, What are the ways that I can determine what I am like and what might someone else be like? Two perspectives on reasoning—how reasoning and decision making differ across cultures as well as how reasoning and decision styles might be used to develop a cultural map of other people—are important for cultural understanding. Reasoning provides us with an answer to a second question, What is this person like and why are they this way? Finally, although the content and structure of self-concept differ by culture and individual, the elements that make it up do not differ. This commonality of elements provides a beginning for understanding people in another culture. Our focus on the self-concept of people and role identity addresses a final question, What can people be like and why? This is critical to understanding others.

Thus, the nature of cognitive CQ reflects these three questions of identity and self in a social context. This approach may seem very psychologically focused, but the reader should note that we have always focused on self-concept in situ. For someone who is highly interdependent and has a highly integrated role identity, self-concept reflects strong situational ties based on interpersonal relationships. For someone who is highly context sensitive, self-concept likely reflects a complex set of conditional knowledge features and a fuzzy logic to trait descriptions (Cantor and Kihlstrom 1985).

Our discussion suggests that knowing oneself and personal preconceptions concerning interpreting social events is sufficient for high CQ. Of course, this is only part of the story since cross-cultural social interactions require knowledge of self and knowledge of the target. This knowledge of the target means having both a specific knowledge of the content of the target person's social information processing and a set of metacognitive rules for gaining this information when it is not readily ascertained. A certain level of cognitive flexibility is critical to CQ since new cultural situations require a constant reshaping and adaptation of self-concept (schema, scripts, and so on) to understand a new setting. Flexibility of self-concept and ease of integrating new features into it are associated with high CQ since understanding new cultures may require abandoning preexisting conceptualizations of how and why people function as they do. But flexibility is only part of the issue; high CQ requires a capability of a person to reformulate their self-concept (and concept of others) in new complex configurations. Thus, flexibility *and* a capability to inductively reorganize one's self-concept is necessary.

The capability to reason inductively is a more traditional cognitive skill that is important for CQ. Reasoning is essential for how a person can approach and understand a completely new context without being constrained by past experiences and preconceived ideas. A person having high CQ needs to have very good inductive reasoning skills, since many new cultural contexts provide, at best, ambiguous and, at worst, misleading, cues for what is happening. Analogical reasoning is important as well; it helps a person transfer knowledge and experience from one domain to another and to develop metacognitive rules that will prove useful in additional cultural contexts. Thus, the experiences that Hall gained from his Japanese hotel stays might be combined with other types of experiences to form a sense of his actual status within the Japanese community.

CQ reflects cognitive processing capabilities in a several ways. It captures a person's self-concept and its degree of differentiation and flexibility. A person having a high CQ has a well-differentiated concept of self but with a high degree of malleability. Incorporating new information and using the self as a complex filter for understanding new cultural settings is critical. A self-concept perspective is a useful way of thinking about the cognitive facet of CQ. We can think of the information that people have about themselves and others as hierarchically organized, consisting of various features of persons, situation, and episode/task. High CQ people use inductive and analogical reasoning skills to step beyond their existing knowledge and to fully understand what is going on around them. This understanding is not merely empathy; the cues relied on by someone empathetic to determine another person's affective state may be absent or contradictory in a new culture. A high CQ person must inductively create a proper mapping of the new cultural setting to function effectively. However, a full understanding of the social situation is only the beginning.

# 5

# MOTIVATIONAL BASIS OF CULTURAL INTELLIGENCE

The motivation of a person concerning a cross-cultural encounter is a largely overlooked aspect of adjustment. Although most researchers looking at such adjustments will posit the importance of being "in the right frame of mind" or "properly motivated and open to new experience," this component of adaptation is generally neglected or given little serious attention. Even in recent models of intelligence emphasizing contextually based capacities (for example, Sternberg's Triarchic Model, Gardner's Multiple Intelligences Model, Salovey and Mayer's work on emotional intelligence), a person's motivation to engage the world around them seems to be an afterthought and not well integrated into the authors' thinking. For example, Sternberg's recent work on tacit knowledge (Sternberg et al. 1999) focuses on knowledge as procedural memory. According to Sternberg and his colleagues, what is critical for understanding practical intelligence (successful intelligence and so on) is the important role that tacit knowledge plays in a person's adaptation to a changing environment. Although they acknowledge that other factors play an important role in predicting employee performance (such as motivation to succeed), they fail to provide a motivational aspect of their cognitive model. Interestingly, procedural knowledge can easily be adapted to incorporate motivational dimensions to it since procedures require not only a frame of "what steps from a to z are to be followed," but also "how hard to do steps a through z." That is, procedural knowledge incorporates aspects of effort as well as content. Further, the shift of controlled to automatic processing (Shiffrin and Schneider 1977) leads to a dynamic reallocation of mental resources as well (see Kanfer and Ackerman 1996, for a further discussion).

Similarly, Sternberg's Triarchic Model (1985) discusses a subcomponent theory (componential) that incorporates a procedural knowledge feature individuals use to adapt to a new environment, but it neglects motivational aspects such as a willingness to engage the environment, persevere in the face of adversity, and so on. His third subtheory (contextual) likewise deals with ways that an individual can interact with her environment, but it neglects to consider motivational aspects of such interaction.

Regardless of whether one believes that proactively engaging the environment will enable one to learn more about new cultural surroundings, if one lacks the requisite efficacy to do so he or she will not do so (Bandura 1997). Cultural intelligence requires not only a cognitive understanding of a new culture but also a person's motivation to engage the new culture.

Our discussion of cultural intelligence from a motivational perspective emphasizes a person's values, efficacy expectations, and goals as central. The value and preference structure gives rise to particular motives, and these are, in turn, the impetus for setting goals and direction of action. Motives are discussed in relation to a person's desire to integrate into his or her work unit as well. We draw from Values Theory (Ajzen 1991; Rokeach 1973; Triandis 1972), Status Theory (Hughes 1971; Mulder 1977), and Categorization Theory (Tajfel and Turner 1986) as a means of understanding how people's motives may differ with regard to CQ.

Adjusting to new cultural circumstances has often been viewed as a motivational issue by researchers in organizational behavior (Ronen 1989; Tung 1981b, 1982) in addition to the cognitive and job-related skills needed for adjustment. What are the characteristics that help predict someone who will adjust successfully to another culture? Anecdotes and observation provide some insights from various training institutes. For example, Vulpe (1998) describes his development of a profile for the Canadian Foreign Service. His ideal candidate has a profile consisting of nine general capabilities, including adaptation skills, attitude of modesty and respect, understanding of the concept of culture, knowledge of the host country and culture, relationship-building, self-knowledge, intercultural communication, organizational skills, and personal and professional commitment. It is only this final element, personal and professional commitment, which seems to address the motivation a person has concerning intercultural learning and experience. Vulpe describes one element of this last core competence as, "give evidence of wanting to contribute to the local community . . . have a clear and realistic awareness of their own motivation and expectations regarding the assignment and personal life abroad" (1998, 11). Evidence from other studies on expatriate selection and placement provide similar results concerning the motivation an expatriate has with regard to his or her assignment.

In a foundational study of expatriate selection, Tung (1981a) identified four general areas of competencies needed for successful expatriate adjustment, including technical job competence, personality traits or relational abilities, environmental variables, and family situation. Further, she identified eighteen specific criteria for selecting an expatriate into four general job categories (for example, CEO, functional head). Some of the criteria, such as maturity and emotional stability or technical skills, were used consistently across the various job categories. Other criteria were unique to particular classes of jobs such as ability to communicate (important for a CEO but less so for a technical specialist).

One of the most interesting outcomes of Tung's study is that although relational ability is consistently rated as very critical for expatriate work success, other factors such as family situation (spouse willingness) and language skills (verbal and nonverbal) are important as well. Of these various skills, a person's motivational state and the motivational state of the spouse are critical keys for expatriate success. One of the most common reasons for expatriates to fail in completing their work assignment is attributable to spouse adjustment (or, more appropriately, lack of adjustment). This failure to adjust is largely a motivational issue reflecting a spouse's capacity for adjustment. Similarly, the expatriate's personal difficulties in adjusting are largely tied to personal motivation and desire to adjust. Ronen broke down the motivational state of an expatriate into five subcomponents, including belief in the mission, congruence with career path, interest in overseas experience, interest in the specific host-country culture, and a willingness to acquire new patterns of behavior and attitudes (as discussed in Dowling, Welsh, and Schuler 1999). These five subcomponents are interrelated at a conceptual level if one uses a motivational view to interpret them. Belief in mission and congruence with one's career path are related to distal expectancies, while interest in overseas experience and host-country are related to a general openness to experience (Ackerman and Heggestad 1997; Costa and McCrae 1992). Similarly, a willingness to acquire new patterns of behavior and attitudes is clearly tied to personal motivation and efficacy.

More recent work on this topic by Mendenhall, Oddou, and their colleagues (Mendenhall 1999; Mendenhall and Oddou 1985) suggests that there are four critical factors for successful adjustment, including a self-oriented, others-oriented, perceptual, and cultural toughness dimensions. The first dimension, self-orientation, refers to activities that strengthen the expatriate's self-esteem and self-confidence. This dimension is composed of three subfactors, including reinforcement substitutes (replacing pleasurable events from home with new ones from the host culture), stress reduction (engaging in temporary withdrawal activities that allow the expatriate to gradually adjust to the demands of the new culture such as pursuing a personal hobby or interest), and technical competence (having the skills needed to successfully complete an assignment).

The second dimension, others-oriented, refers to activities and attributes that help an expatriate interact successfully with host-culture nationals. Two subfactors exist for this dimension, including relationship development and willingness to communicate. The relationship development refers to a person's capability to develop long-term relationships with locals, whereas the willingness to communicate reflects an expatriate's confidence and willingness to use the host-culture's language. The nature of this confidence will play a prominent role in our discussion later in this chapter concerning motivation from a self-efficacy perspective (Bandura 1997). As Mendenhall and colleagues note, this willingness to communicate hinges not on target language fluency, but on a person's willingness to attempt to interact with the host-culture members using their own language. An expatriate who is not fluent may well pick up a few choice phrases (for example, jargon, popular events) and earn a great deal of credit with locals. These modest attempts are often viewed by host-culture members with great appreciation. Further, such actions on the part of an expatriate stimulate a better empathy and understanding of the local culture by helping her "think" like a local.

The third dimension refers to perceptual issues of adjustment, and it is better described as an attributional feature of the expatriate rather than perception itself. By this dimension it is meant an expatriate's capability of taking the perspective of locals so as to understand why things unfold as they do. This feature is more directly related to our earlier discussion of the cognitive basis for CQ, since it has to do with the problem-solving and idea-generalization aspects of cognitive processing in the case of attribution. Mendenhall and colleagues suggest that the most successful expatriates are those who tend to be nonjudgmental and nonevaluative in interpreting the behavior of host-country nationals, which leads to clearer information exchange and better interpersonal relationships between expatriates and host-country nationals. Although we agree that premature judgments laden with one's own cultural values may be undesirable, we suggest that it is inevitable that one's values play a role in the attribution process. However, a clear sense of self-understanding may provide a way for people to avoid excessive misattribution of local events.

Finally, the fourth dimension refers to a cultural-toughness orientation, or the exogenous demands placed on the expatriate as a result of the specific assignment itself. That is to say, in particular cultures the novelty and demands placed on an expatriate are much higher than in other cultures, and this influences the nature of a person's adjustment. For example, Hall describes the significant difficulty that he had in adjusting to a high-context culture (Japan) given his low-context background (1976). The challenge facing someone who comes from a low-context culture (for example, social cues tend to be very direct and obvious) and is working in a high-context culture (for example, social cues are indirect and embedded) can be difficult to surmount.

A critical factor central to the descriptions of expatriate adjustment in all of these general sources (Tung, Ronen, Mendenhall, and Oddou) is that of the expatriate's motivation to adjust and function in the target culture. This motivation is reflected in a number of factors, including relational ability and family context (Tung), motivational state (Ronen), and self/other-oriented (Mendenhall and Oddou). Although these, and other international human resources management researchers (for example, Adler 1981; Black 1988; Black and Gregersen 1990; Black and Mendenhall 1990; Dowling et al. 1999; Earley 1987; Erez 1994; Fiedler, Mitchell, and Triandis 1971), have pointed consistently to the importance of motivational factors in understanding cultural adjustment, the discussion has been generally atheoretical and lacking a coherent structure. We draw from Erez and Earley's Cultural Self-Representation Theory (see Chapter 3 for a more complete overview of the Erez and Earley model) as a way of understanding how motivation functions within CQ.

The experience of self-enhancement is affected by opportunities in the environments, and by cognitive self-regulatory processes of sampling, assessing, and interpreting such opportunities. An example of the self-enhancement motive is the general tendency to distort reality in the service of maintaining a positive self-conception through selective perception and bias in attribution (Turner and Oakes 1989). People judge others on dimensions that are personally relevant and prefer and seek out positive information about themselves. Self-efficacy is another source of motivation in CQ and refers to a judgment of one's capability to accomplish a certain level of performance (Bandura 1986, 391). As Mendenhall and Oddou describe, people tend to avoid tasks and situations they believe exceed their capabilities. Efficacy judgments promote the choice of situations and tasks with high likelihood of success and eliminate the choice of tasks that exceed one's capabilities. It is not clear how, exactly, the social environment shapes a person's collective efficacy and whether it is more likely to develop in certain cultures than others. Bandura (1997), Markus and Kitayama (1991), and Triandis (1995) are among the scholars who suggest a number of ways that cultural syndromes can influence either individual or collective efficacy.

As an element of CQ, self-efficacy plays a particularly important role since much of what we think of as successful intercultural interaction is based on a person's general sense of efficacy with regard to social discourse in the new setting. The sense of continuity and self-consistency helps individuals to attach their current events of social life to past experiences and to maintain a coherent view. This motive leads to the active construction of memories and selective perceptions in line with previous events and activates and directs people to behave in accordance with the values and norms implied by the identities to which they became committed. To understand the importance of values for understanding what motivates a person, we begin by discussing the nature of values from a cultural perspective. We draw on the literature from several sources including Parsons and Shils (1951), Kluckhohn and Strodtbeck (1961), Rokeach (1973), Morris (1956), and Schwartz (1994) as key examples.

According to Parsons and Shils (1951), social or individual action occurs within the constellations of three interdependent systems—social, personality, and cultural. The social system has three basic characteristics: (1) it involves an interaction between two or more actors; (2) the situation toward which the actors are oriented include others who are the object of cathexis; and (3) actors behave in concert as a function of a collective goal orientation. The personality system refers to a system of interconnections of actions for a given actor organized according to a structure of need-dispositions and goals. The cultural system is guided by the organization of values, norms, and symbols that guide the choices made by actors and direct their interactions. It is more abstract than either the individual or social systems. The pattern of regulatory norms are derived from coordinated components, and the cultural system represents a pattern whose parts are interrelated to form value systems, belief systems, and systems of expressive symbols.

There are three general modes of value-orientation that combine in the context of these various systems to give rise to key value orientations. These value-orientations or pattern variables include affective versus affective neutrality, self-orientation versus collectivity-orientation, universalism versus particularism, ascription versus achievement, and specificity versus diffuseness. Parsons and Shils referred to these five dichotomies as pattern variables and the specific resultant combinations of all five variables as the value-orientation. Affective versus affective-neutrality refers to the extent it is acceptable for individuals to experience immediate gratification. In an affective culture, individuals are permitted to indulge in immediate gratification, whereas in an affectively neutral culture individuals restrain from such excesses. Self-orientation versus collectivity-orientation briefly refers to the relation of an individual's pursuit of self versus collective interests. In a self-oriented society, individuals pursue their own interests and "do their own thing," whereas in a collectively oriented society, individuals view their own actions in terms of their impact on others in their collective, or group. Universalism versus particularism refers to the role of general rules in guiding action. In a universalistic culture, a broad set of rules and policies will guide all individuals' actions, and conformity to these standards is expected, whereas in a particularistic culture individuals are guided by the unique aspects of the situation and its relevance to specific aspects of the actor. Ascription versus achievement refers to how an individual is judged in a society. In an ascriptive culture, individuals are judged by attributes that they possess (for example, social group membership and possessions), whereas, in an achievement culture, individuals are judged by their actions and performance (for example, skills, work habits). Finally, specificity versus diffuseness refers to the breadth of how relations among actors and objects are limited. In a diffuse culture, the relation of the actor to the social object can be quite indirect, whereas in a specific culture this relation is quite narrow and limited.

Morris (1956) looked at philosophical orientations across cultures through a series of studies he conducted. His empirical work was a logical extension of his philosophical work, and he developed a values scale using this background. He used a tripartite framework to develop a set of various ways that people live as an indicator of their values. The basic values reflected in the various lifestyles were Dionysian (indulgence of desires and overt expression of enjoyment); Promethean (tendency to actively shape the world and adapt it to man's interests); and Buddhistic (self-regulation and control as well as temperance of our desires). These three values were combined into thirteen statements that a respondent responded to by stating whether he or she liked it (the lifestyle). Morris applied his lifestyle scenarios to student samples from the United States, India, Japan, China, and Norway and found that American students were activist and self-indulgent and less subject to social restraint and self-control, whereas the Japanese students had a general orientation toward people and society. The Chinese students showed a strong tendency toward enjoyment and activity as well as self-sufficiency.

Another value-orientation model was proposed by F. Kluckhohn and Strodtbeck (1961) who argued that there are five basic value-orientations underlying cultures. These orientations include human nature (good versus mixed versus evil crossed with the mutability of the goodness), relationship to nature (subjugation-to-nature, harmony-with-nature, mastery-over-nature), time (past, present, future), activity (being, being-in-becoming, doing), and relational (lineality, collaterality, individualism).

Human nature refers to the innate goodness of people. For example, according to traditional Puritan thought people were thought to be evil that had to be controlled. Emphasis was placed on controlling and regulating behavior to prevent the evil from spreading. Relationship to nature refers to the relation of the individual to coping with nature. The time orientation refers to the time frame salient to a group. An activity orientation refers to self-expression in activity. In a Being society, emphasis is placed on immediate gratification and spontaneous action much like Morris's (1956) Dionysian dimension. A Being-in-Becoming society focuses on action and accomplishment—measurable achievements. Finally, the relational orientation refers to an individual's relation to his or her collective similar to Parsons and Shils's self-orientation versus collectivity-orientation with an addition of a temporal dimension (lineality).

While the frameworks derived by Parsons and Shils as well as Kluckhohn and Strodtbeck provide typologies of cultural values, they do not provide a coherent underlying theoretical framework for understanding the relationship of value orientations to personal motivation (and hence, our application for CQ). However, the framework proposed by Rokeach (1973) developed a general model of values and the self that can be used to do so. In Rokeach's model, the relation of values to an individual's belief system and definition of the self is central to his model. A value refers to "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. A value system is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance" (Rokeach 1973, 5).

There are a number of important characteristics that can be derived from this definition. First, a value is an enduring but malleable construct. If it were unchangeable then an individual would be static and subsequent experiences would not have an effect on his values. If it were infinitely changeable then an individual would act in a nearly random fashion. The relative stability of values can be traced to the manner in which we typically adopt these values, namely, during early socialization experiences as a function of childhood. Second, a value is a belief that is prescriptive or postscriptive, meaning that a value forms the basis for judging the desirability of some means or end of action. It is the belief that is the basis of preferences that guide action (Rokeach 1973, 7). Third, a value refers to a mode of conduct or an end-state of existence. Rokeach argued that there are two types of instrumental values (moral and competence) and two types of terminal values (personal and social). Moral instrumental values mainly refer to modes of behavior (for example, behaving honestly), and they do not necessarily correspond to particular end-states. Competence instrumental values refer to personal accomplishment and self-actualization. The personal and social terminal values refer to the self-centered versus the social values.

These values act to guide self-presentations, evaluate, and judge ourselves and others, act as a basis for morality and competence comparisons with others, direct individuals concerning what ideas of others should be challenged, and tell individuals how to rationalize beliefs and actions that would otherwise be unacceptable so as to preserve self-image (Rokeach 1973, 13). Values serve to motivate in several ways:

> Instrumental values are motivating because the idealized modes of behavior they are concerned with are perceived to be instrumental to the attainment of desired end-goals. If we behave in all the ways prescribed by our instrumental values, we will be rewarded with all the end-states specified by our terminal values. Terminal values are motivating because they represent the super goals beyond immediate, biologically urgent goals. Unlike the more immediate goals, these super goals do not seem to be periodic in nature; neither do they seem to satiate—we seem to be forever doomed to strive for these ultimate goals without quite ever reaching them.
>
> But there is another reason why values can be said to be motivating. They are in the final analysis the conceptual tools and weapons that we all employ in order to maintain and enhance self-esteem. (1973, 14)

Thus, values serve a powerful motivational influence in three ways: they are instrumental to attain desired end-states, they are desired end-states, and they help one define and reinforce one's sense of self.

Rokeach developed a general model of belief systems in which an individual's values play a preeminent role. An individual's belief system is composed of ten subsystems that can be conceptualized as a series of concentric circles. At the innermost circle are an individual's cognitions about the self, or self-image. The next layers that follow are (in sequence moving away from the self): terminal value system, instrumental value system, attitude system, attitude, cognitions about own behavior, cognitions about significant others' attitudes, cognitions about significant others' values or needs, cognitions about significant others' behavior, and cognitions about behavior of nonsocial objects. From this scheme there are a number of interesting issues that can be highlighted. First, value systems play a key, central role in an individual's belief system. Second, a belief system is a functionally interconnected system, so a change in one subsystem will have an impact on other subsystems. Third, the ultimate purpose of the total belief system including value systems is to maintain and enhance an individual's self-image, or self-regard. Fourth, changes in one subsystem will impact other related subsystems in both directions of the subsystem hierarchy and the individual's self-image as well. Fifth, contradictions among subsystems will usually result in a change in the subordinate system. So, if an individual's attitude is changed through some organizational intervention (for example, conveyed through socialization during meetings) but is in conflict with an existing value, then the attitude change will be temporary and the attitude will return to a more consistent position.

What motivates a person from a values perspective? According to Rokeach, dissatisfaction arising from contradictions among subsystems gives rise to personal motivation. Rokeach argued that it is the affective experience of self-dissatisfaction, and not the cognitive contradiction itself, that gives rise to changes. The underlying change occurs as an experience of negative affect arising from self-dissatisfaction due to moral or competence issues. As suggested earlier, self-dissatisfaction arising from conflicting subsystems implies that the hierarchically subordinate system will be most likely to change. Again, however, the exception lies in the relation of the conflicting subsystems to superordinate systems, particularly the self-image. Thus, an attitude and a value that are contradictory will likely be resolved by the attitude changing unless the attitude is more consistent with an individual's self-image. In this case, an individual will be most likely to change the conflicting value in order to maintain the attitude that is consistent with the image of self.

Glenn and Glenn (1981) proposed a cognitive value approach looking at associative versus abstractive cultures. In associative cultures, people use their own associations among categories when they interact and they assume that others share their associations. For example, if a supervisor tells his or her employee to "get the work done soon," it is assumed that the subordinate implicitly understands what work should be performed, what "soon" means, what the consequences of failing to perform will be, and so on. In other words, in associative cultures there is a strong assumption of shared meaning, and the context of the interaction conveys much of its meaning. In an abstractive culture, people tend to be very explicit in their interactions and define their terms carefully. Associative cultures are characterized by face-to-face communication whereas abstractive cultures are characterized by communication in the mass media. Additionally, in associative cultures an appropriate response to someone's action may not appear directly linked to the original behavior (for example, helping someone to understand a new word processor may be reciprocated with an invitation to lunch several weeks later). In abstractive cultures, actions are often linked to immediate and corresponding reactions (for example, one worker helping another to complete a job results in a direct reciprocation of helping with work). Thus, the exchanges in an abstractive culture tend to be characterized as tit-for-tat or direct exchange whereas in an associative culture they may be more diffused. Glenn also discussed ideologists versus pragmatists as a dimension of culture. Pragmatists focus on information that is useful or practical whereas ideologists begin with a broad framework and sample facts to see if they fit into an existing framework.

Other studies of values include work by Ronen and his colleagues (Ronen 1978, 1982, 1986; Ronen and Shenkar 1985), which focuses on cluster and small-space analysis of various countries using a number of basic values. A highly regarded study that still serves as a basis for many current studies was the massive work of Haire, Ghiselli, and Porter (1966) in their study of managerial values. In this study, Haire and colleagues surveyed managers from fourteen countries concerning their attitudes and values toward work relationships, organizations, leadership, work goals, among others (Haire, Ghiselli, and Porter 1966). Maehr and Braskamp (1986) developed a Personal Incentives Model to describe responses of 575 American and 467 Japanese managers. They found that Americans emphasized affiliation, recognition, and social concern more than the Japanese who emphasized financial incentives and task and excellence.

There are several studies of values that address component aspects of culture such as Bond and his colleagues (for example, Bond 1988; Leung and Bond 1984), and their work focuses on equity and equality norms/values held in Asian versus Western cultures. Bond (1988) developed a Chinese Values Survey that consists of forty items, and his study of twenty cultures demonstrated several clusters of values: Confucianism—emphasis placed on filial piety, moderation, humbleness, and sense of shame; Oriental tradition—emphasis placed on industry, kindness, loyalty to superiors, and courtesy; and relationship orientation—tolerance of others, harmony with others, solidarity, patience, and courtesy. Bond correlated his factor scores with those of Hofstede and only found a significant relation of his dimensions with power distance and individualism from Hofstede.

A comprehensive assessment of cultural values with a strong theoretical underpinning was presented by Schwartz and Bilsky (1987) and Schwartz (1994) concerning their model of a universal structure of values. They developed a theory of values by viewing values as cognitive representations of three universal requirements: biological needs, interactional requirements for interpersonal coordination, and societal demands for group welfare and survival. The core of their model is the interaction among three facets of values—goals, interests, and motivational domain. Goals refer to the instrumental versus terminal aspects of values, and interests refer to an individualist versus a collectivist versus a “both” orientation. The third facet, motivational domains, consists of eight aspects. This work has been extended across dozens of different countries and settings (Schwartz 1994) showing a robust typology of values.

The centrality of values to the motivational component of cultural intelligence lies in their role as shapers of preferences for engaging in particular actions over others, as well as their role in a person's self-concept. There is an extensive literature in social psychology connecting a person's values to their subsequent actions (for example, Ajzen 1991; Ajzen and Fishbein 1980; Triandis 1967, 1971, 1972) in a cultural context in addition to the work we cited such as Rokeach's approach. By no means would we suggest that personal and/or cultural values have a direct and highly deterministic influence on a person's actions and predispositions, but there is ample evidence linking values to a wide variety of outcomes including behavior and decision-making outcomes (Ajzen 1991). With regard to cultural intelligence, a person's values shape the evaluations that he makes concerning other cultures (among other things). Take, for example, the classic model of subjective culture posited by Triandis (1972). A person's values (shaped through cultural influences as well as personal experience) influence the evaluation one makes concerning various potential actions such as proactively engaging others in a new culture. Mere exposure to another culture is insufficient for predicting assimilation or understanding (Triandis 1972). In a study of stereotyping and assimilation, Triandis (1972) found that the openness of the target culture played a strong role in whether mere exposure would attenuate or exaggerate cultural stereotyping of Americans by Greeks or Greeks by Americans. He found that mere exposure to a closed culture (close-knit and guarded against the interaction with outsiders) worsened stereotyping by the observing group. However, if the target culture was open to outsiders, then stereotyping was reduced by increasing amounts of exposure. We would turn this finding around a bit and suggest that individual observers who are more "open" to new experience and ways of doing things will be more likely to move from stereotypes to sociotypes (accurate representations of the target culture) as a function of increasing amounts of exposure to another culture. However, if an individual is not open, then mere exposure will exacerbate stereotyping.

A person's values reflect personal dispositions concerning openness to new experience. Without wishing to debate the causal influence of values on personality, clearly there is congruence between facets of personality and one's values (Rokeach 1973). Thus, a person who values new experiences, learning about others, and so on, is likely to be high on openness in their personality. These values guide behavior through an evaluation of decision alternatives (Ajzen 1991) and are related to motivation to act (Vroom 1967).

Values play a central role in one's self-concept as well, and this influences a person's motivational component of cultural intelligence. The cultural self-representation model of Erez and Earley (1993) argues that three motives are central to a person's self-concept—enhancement, efficacy, and consistency. Values play the most direct role in a person's self-enhancement motive since they provide the benchmark to judge social objects. The result of this judgment is an evaluation of a target social object as a potential source of enhancement. Put simply, one's values enable us to evaluate which one of several social groups will help us feel better about ourselves if we join them. A person who has a strong motive for self-enhancement may be more likely than others to engage people in a new culture since it becomes a source of positive reinforcement and self-affirmation. Further, a person with a strong self-enhancement motive is likely to try avoiding threatening others' face (Earley 1997) and to discover as much about a new cultural setting so as to maximize opportunities for personal enhancement.

This influence of values also reflects the nature and structure of self-concept (Markus and Wurf 1987; Markus and Kitayama 1991). Individuals having values of collectivity over individuality develop more extended self-concepts with overlapping spheres of identity (Gecas 1982; Markus and Kitayama 1991). For example, a person from a collectivistic culture likely views herself as a member of a number of overlapping groups including family, work, hobby, religious, and so on. A person from an individualistic culture perceives these various identities as separable and malleable (Triandis 1995). This difference may have a somewhat counterintuitive prediction, namely, that individualists are more likely to have a higher motivational aspect of CQ than their collective counterparts. The logic of this argument is that although the collectivists have more overlapping identities, the boundaries around these identities are rigid and well-defined. That is, I may see myself as a company man, family man, member of my sports team in an overlapping fashion, but I do not mean any company, any family, or any sports team. Rather, I am a Unilever man, husband to my spouse, Elaine, and member of the Indianapolis intramural softball team for my neighborhood. These identities are overlapping and integrated but very clearly defined. The individualist may have a less integrated self-concept (at work I am a Unilever man, at home I am husband to Elaine, and so on) but the particular role memberships are more flexible (after quitting the softball team, I am now a member of the local golf team, and tomorrow I may switch to the local tennis team).

What might this flexibility mean with regard to motivation and CQ? An individualist is constantly moving from one in-group to the next as excessive demands are placed on the person (Triandis 1995; Triandis and Bhawuk 1997). In order to "fit" into new in-groups, an individualist must be motivated to learn about the target group. Thus, an individualist is likely to have a higher motivation to learn about a new group and, hence, greater openness to new experience, than a collectivist who perceives in-group memberships as long-term and quasi-permanent. A possible counterargument to this logic is that the individualist has a limited motivation to learn how to fit into a new group since excessive demands will be met with an exit strategy (if this group is too difficult to deal with he or she will move along to the next group that might satisfy one's needs). A collectivist is not afforded such a luxury since group memberships are long lasting.

Our suggestion is that although an individualist's self-concept may be less complex and interdependent than a collectivist's self-concept, it may require greater motivational CQ in order to satisfy an inherent mobility of group affiliation. As a practical example, imagine a culture that sends expatriate managers in groups versus a culture that sends its managers as individuals. The expatriates who arrive in a large group have a fully functioning reference group, support group, and so on, thus they are not as motivated to integrate themselves into the local setting. A single expatriate lacking such support and referents must integrate her- or himself into the local culture to function. What cultures are most likely to send expatriates in large and intact groups rather than as single individuals? Those that are highly collectivistic and hierarchical since members from these cultures will value such a move.

Two general motivational frames—self-efficacy expectations and goals—serve to understand CQ. We draw from these two theoretical frames for a number of reasons, including their centrality to self-concept (Bandura 1997), importance for understanding action (Locke and Latham 1990), and ubiquitous nature.

## EFFICACY EXPECTATIONS AND GOAL SETTING IN CULTURAL INTELLIGENCE

From a subjective expected utility frame (Vroom 1967), values only address one part of the equation we can use to predict choice or action. Values (and their associated instrumentalities and valences) provide an important understanding of how various courses of action might be evaluated by a person. This valuation does not address the important question concerning a person's perceived capability to engage successfully the environment. Thus, we have only so far described part of the equation for understanding and predicting a person's adjustment to others. However, one's values are not complete in helping to create an understanding of a new group of people. One not only needs to value the endeavor of discovering a new culture, one also needs to feel capable of doing so and be guided appropriately. Lacking a self-growth or efficacy motive, a person may avoid engaging people from a new culture even if she positively values such actions. Without a strong sense of self-efficacy, a person will avoid challenges and give up easily when confronted with failure feedback. The motivational aspect of CQ requires a personal sense of efficacy and desire for enactive mastery as well as a positive evaluation of such actions. To understand this next aspect of motivation, we turn to two general theories of behavior—Bandura's Self-Efficacy Theory (1997) and Locke and Latham's (1990) Goal-Setting Theory.

Self-efficacy is a central aspect of a person's way of engaging the world. Perceived self-efficacy is "a judgment of one's capability to accomplish a certain level of performance" (Bandura 1986, 391). People tend to avoid tasks and situations they believe exceed their capabilities. Efficacy judgments promote the choice of situations and tasks with high likelihood of success and eliminate the choice of tasks that exceed one's capabilities. However, efficacy judgments are not merely cognitions concerning capability per se; as Bandura describes:

> Effective personal functioning is not simply a matter of knowing what to do and being motivated to do it. Nor is efficacy a fixed ability that one does or does not have in one's behavioral repertoire, any more than one would regard linguistic efficacy as a collection of words or a colony of preformed sentences in a verbal repertoire. Rather, efficacy is a generative capability in which cognitive, social, emotional, and behavioral subskills must be organized and effectively orchestrated to serve innumerable purposes. This is a marked difference between possessing subskills and being able to integrate them into appropriate courses of action and to execute them well under difficult circumstances. (1997, 37)

There are a number of factors that influence a person's efficacy expectations, including prior task mastery, role models, and so on. However, this description needs further explication with regard to intercultural encounters for a number of reasons.

Efficacy is context and domain specific. That is to say, a person's efficacy expectations are best tied to the specific context at hand. Although my prior mastery experiences with intercultural encounters might enhance my general sense of efficacy with regard to such encounters, it does not guarantee a high sense of efficacy for any particular newly encountered culture. For example, an expatriate manager who has had three successful assignments in Central Europe is now sent to Indonesia. Will these prior experiences provide a strong sense of enactive mastery and, hence, high self-efficacy? Bandura cautions that such generalizations across domains and tasks are problematic in many cases. For example, one obvious change for the expatriate is that she is now going to Asia and the three previous assignments were all in Europe. Likewise, she may be asked to do very different activities in Asia (for example, start-up a new plant) than she had done in Central Europe (for example, new brand development and management). In fact, if this expatriate manager fails to recognize the potential differences among these operating contexts, she may have an unrealistic (inappropriate) level of efficacy, and this will be problematic for the assignment.

A generally strong and high level of self-efficacy itself is not necessarily detrimental to CQ and adjustment in the long term. A person lacking behavioral or strategic competence (or worse yet, who uses inappropriate behaviors confidently!) needed to perform an action is at an obvious disadvantage. However, high efficacy expectations (perhaps overly high) are not necessarily detrimental to adjustment in a new culture. A strong sense of efficacy leads an individual to search for new and better ways of engaging the environment. So long as there is guidance for this search, there is no reason not to expect it to be a successful one (Earley, Connolly, and Ekegren 1989).

Another important feature of self-efficacy relates to its generative capacity for self-regulation of primary systems. Self-efficacy is not merely a cognition concerning an estimate of capability; it is a richer construct having an influence over the management and display of cognitive, motivational, and emotional subsystems of a person. Thus, the type of generative activity ascribed to emotional intelligence, for example a person's capability of regulating their own emotional states, is an inherent aspect of self-efficacy. Put another way, emotional intelligence (and related approaches to intelligence) incorporates a strong motivational component even if it is not actively incorporated by scholars. The generative aspect of self-efficacy is very important in cross-cultural encounters since little automatic processing occurs and the extensive controlled processing may prove to be overwhelming to an individual (Shiffrin and Schneider 1977). In this sense, we argue that an approach such as Sternberg's practical intelligence is incomplete without a motivational element such as self-efficacy. Capacity to adjust is linked to practical intelligence features, such as procedural and tacit knowledge, but it is also linked to generative regulation of personal resources best understood through an efficacy framework.

A difficulty for self-efficacy prediction is presented by ambiguous task environments, such as presented by highly complex cognitive tasks. Bandura suggests that efficacy judgments for the cognitive operations required for complex problem-solving may be limited because the most easily observed cues from the task may not be the critical ones needed. Further, complex problem solving may require a number of suboperations for which efficacy estimates may vary, so efficacy judgments become muddied. This effect is very important for CQ since the task of understanding a new culture is inevitably a complex and uncertain one. The interplay of various efficacy subcomponents is illustrated with an example of an expatriate manager who goes from his host culture to a new one. In the new locale, his efficacy expectations for cultural adjustment are based on several subcomponents including his efficacy for understanding the new language, nonverbal signals, work setting, cultural hierarchy, and so on. What is not known in the literature is how these component-efficacy elements might combine to provide an overall efficacy judgment for adjustment. That is, are these compensatory estimates (high efficacy in one category compensates for low efficacy in another category), multiplicative estimates (low efficacy in one category ultimately determines the overall level of efficacy), and so on?

The complexity of the environment represents a challenge for CQ-related efficacy. Highly efficacious people not only persevere but also set goals and expectations such that they will proactively search for new and useful strategies for approaching the goal of cross-cultural interaction. That is, a person's efficacy motive is an important feature in their creation of new procedural and declarative knowledge concerning intercultural understanding at both micro- and more mediate levels.

A related feature of a person's motivation is the goal(s) that he or she has with regard to interaction. Self-efficacy alone does not dictate the target of action for an individual—self-efficacy and goals are complementary features in an overall model of motivation. Thus, we cannot fully describe the importance of self-efficacy as a motive of the self without describing the interactive role of personal goals.

Goal setting has a long tradition in the organizations literature that can be traced back to the seminal work by Edwin Locke in his initial work (1968) on motivation and goals. The original goal-setting model was, in fact, postulated in cognitive terms of information processing. It consisted of five steps: (1) environmental stimuli → (2) cognition → (3) evaluation → (4) intentions, goal-setting → (5) performance (Locke 1968).

Early empirical research focused mainly on the relationship between intentions and performance. Goals and intentions were considered to be almost identical under the assumption that people intended to attain their goals, and goal commitment was not questionable. In the few cases where subjects did not accept their goals they were omitted from the study because the predictions of the model were limited to cases of high goal commitment (Erez and Earley 1993). Goals and intentions may overlap each other when goals are self-set. However, when goals are externally set this assumption becomes questionable and intentions to become committed to the goal cannot be taken for granted. One could reason that goals are self-set at the end of the evaluation process where a choice is made on the basis of the expected contingencies between effort and goal-directed actions, and between actions and outcomes (Erez, Earley, and Hulin 1985). Yet, when goals are externally set they start the evaluation process, which may end up in either a high or a low level of commitment, depending on the meaning of goals for one's well-being.

Goal appraisal was not examined in early tests of goal setting. However, the revised goal-setting model as postulated by Locke and Latham (1990) considers the process by which goals are being appraised. In particular, the modified model focused on the effects of goal difficulty and specificity on valences of goal attainment, and on perceptions of self-efficacy. Valences are measured in terms of expected satisfaction from goal accomplishment when no extrinsic incentives are offered for performance. Among the reasons given by people for agreeing to try for an assigned goal were that they could improve their skills, trying for a goal gave them a sense of achievement, and it gave them an opportunity to prove themselves to be competent (Mento and Locke 1989). Research on charismatic leadership suggests that charismatic leaders present goals in terms of the values they present. Doing so makes action oriented toward the accomplishment of these goals more meaningful to the follower in the sense of being consistent with his or her self-concept (Bandura 1997).

Goals have several effects on an individual's self-efficacy expectations. They provide a sense of purpose and direction and clarity concerning performance expectations (Wood and Bandura 1989, 470). Goals influence individuals' normative beliefs of what they think they can and should try to perform (Bandura 1997). Positive relationships were found between goal level and perceptions of self-efficacy (Locke, Frederick, Lee, and Bobko 1984). Thus, goals are appraised in relation to their fulfillment of the self-derived needs (Erez and Earley 1993).

Positive evaluations of goals lead to the development of goal commitment. Goal commitment is a decision made by the individual at the end of the evaluation process to adhere to the goal and not to reject it. Such a decision is an outcome of an evaluation process in which the contribution of goal accomplishment to one's well-being is evaluated. Some researchers argue that goal commitment has a stronger motivational power than goals. This stems from the belief that goal commitment connotes a stake in the consequences and a willingness to persevere and sacrifice to realize the goal (Novacek and Lazarus 1990).

Several factors have been identified to influence goal commitment and can be classified into internal and external factors: internal factors involve choice and control over the goal-setting process, expectancy of success, self-efficacy expectations, and internal rewards. External factors consist of compliance with authority, goal publicness (Hollenbeck and Klein 1987), peer influence, and external control (Locke, Latham, and Erez 1988). Participation in goal setting is a well-researched antecedent of goal commitment (Latham, Erez, and Locke 1988) that takes place at the beginning of the evaluation process; as such, it is similar to the case of self-set goals. Similar to self-set goals, participation allows a person to have more control over decisions concerning his or her own well-being. A goal is more likely to be accepted when it is perceived to be under a person's control than when it is perceived as externally imposed. Participation in goal-setting enables the participants to have control over their decisions and enhances their experienced goal commitment.

Goals specify the conditional requirement for positive self-evaluation (Bandura 1997). The process of evaluating the significance of knowledge about what is happening with one's personal well-being generates emotions. Only through the recognition that one has something to gain or to loose, that is, that the outcome of a transaction is relevant to goals and well-being, does one generate an emotional reaction. Thus, goal appraisal is necessary not only for activating a response toward goal attainment but also for generating emotions that are necessary for energizing action. (Further, Eden suggests that setting difficult goals may raise expectations and trigger self-fulfilling prophecy in organizations. That is, goals may act as cognitive anchors thereby guiding subsequent actions [Earley and Erez 1991].)

Self-efficacy and values (valences) were introduced as mediating variables between goals and performance (Earley and Lituchy 1991; Eden 1975; Garland 1985; Locke and Latham 1990). The core findings of the goal-setting model demonstrated that specific and difficult goals lead to high performance levels if accepted by the individual, and if feedback is provided (Locke and Latham 1990). It can be argued that goal acceptance, or commitment, has a stronger motivational power than goals per se since it connotes a stake in the consequences and a willingness to persevere and sacrifice to realize the goal.

Returning to our discussion of self-efficacy motives for personal growth (Erez and Earley 1993), we can see the interdependent nature of goals and efficacy for understanding motivational aspects of CQ. There is a generally strong path from self-efficacy expectations to personal goals set as described by Wood and Bandura (1989), although a significant feedback loop from performance outcomes and the goals themselves to subsequent efficacy levels is apparent. That is, self-efficacy reciprocally influences personal goals set. Connecting this idea to motivation and CQ, it is clear that individuals who are high in the motivational aspects of CQ are likewise high in personal efficacy and will tend to set specific and challenging goals for themselves to master the cultural quagmire they face.

Individuals who have a high motivation component of CQ are efficacious with regard to intercultural interactions. These efficacious individuals have a strong sense that they are able to deal with the divergent perspectives of others, changing and unfamiliar situations and handling complexity and uncertainty. However, a strong sense of efficacy alone is not adequate for understanding CQ since a person's actions are goal directed; the nature and type of goals that people set for themselves are critical for understanding and predicting the outcomes of intercultural interactions. For example, take two expatriate managers, A and B, having comparable levels (high) of self-efficacy for intercultural encounters. Manager A goes into her first encounter without any specific goals or outcome expectations other than a desire to learn more about the other culture (comparable to a "do your best" goal in the goal literature). Manager B, in contrast, goes into her first encounter with specific goals for intercultural understanding concerning the way people greet one another, how respect for authority is accorded, how exchanges take place between friends versus strangers, whether the culture endorses discrimination based on demographic considerations, and so on. Manager B will take away much more useful information as a result of the encounter and is more likely than Manager A to use this information constructively for subsequent interactions. Further, the sense of mastery over understanding these various specific features of the target culture will provide Manager B with a further enhanced sense of efficacy as well as provide her with a cognitive frame for acquiring further information. More importantly, Manager B will be further motivated to explore the information acquired and expand on it. Thus, efficacy and goal characteristics are complementary.

We note, however, that our example with Managers A and B is somewhat misleading since the very nature of efficacy establishment and utilization suggests that a highly efficacious person will tend to naturally set specific and challenging goals for himself in intercultural encounters. Further, a high level of efficacy suggests past performances (encounters) that were successful from which the future performances will be generated and enacted. Our point remains, however, that efficacy alone is insufficient for understanding the high CQ person.

We are now in a position to combine our earlier discussion on values with our use of efficacy and goals. As researchers have demonstrated (see Locke and Latham 1990, for a review), the goals that people set are determined by their efficacy expectations as well as a subjective evaluation concerning the potential outcomes associated with goal enactment and completion. That is to say, one's goals are determined not only by whether one thinks one can achieve them but also by consideration of what the outcomes of such accomplishment might be (Garland 1985). In everyday tasks and goal setting, the question of value (valence) may be an embedded expectation of the performance contract that one has with one's organization (Latham, Erez, and Locke 1988). Latham, Erez, and Locke's (1988) studies of goal setting, commitment, and participation demonstrated that goals are often adopted automatically by employees in the sense that their implicit employment contract dictates that they will be assigned work by their organization. It is only when these assigned goals evoke a negative emotional response (perhaps they are perceived as undesirable or overly challenging) that a technique such as participation is needed to enhance goal commitment.

Intercultural encounters are very different than the context typically experienced by an employee concerning his or her work. These encounters challenge a person's thinking and assumptions about his or her own culture by contrasting beliefs about right and wrong with a potentially different system. One reaction to such a challenge is for the individual to isolate him- or herself from the new culture. For example, in cross-cultural training that the first author conducts with MBA students using the BaFa BaFa exercise, often a few students react to the simulation by isolating themselves from the culture for which they are members. In the exercise, students are assigned to one of two cultures, alpha or beta, each having very different rules for interaction and cultural norms. To complicate matters further, the first author takes the Alphan culture (traditionally framed as a strongly male-dominated hierarchy) and reverses the status of men and women (now becomes a strongly female-dominated hierarchy). What is observed often is that a few of the male MBA's simply band together in a corner of the room and refuse to interact with others from their culture. They discount the game as "meaningless," although it is clear that their reaction is compensatory for a degree of discomfort that they are unable to deal with through normal interactions dictated by the game's rules.

This example illustrates in some aspects a degree of faltering efficacy on the part of the insecure MBA students. However, we believe that it most likely reflects a discounting of the culture game from a values and face-saving perspective. The personal values and face of these MBAs who opt out of the game reflects their devaluation of an experience that may embarrass them. (For some of them, the actions required [behaviors and rituals that are engaged in such as close physical contact between same sex members of the culture] cannot be engaged in. This is a point that we will address further in the next chapter concerning behavioral aspects of CQ.)

Thus far, we have discussed the contribution of values, self-efficacy, and goal setting to a person's motivation and CQ. What has been left out is the relevance of one's social context as a key contributor to the formation of goals and efficacy expectations (as well as active shaper of personal values). Social setting and context are important to the motivational aspects of CQ using role theory (Stryker 1987), self-identity and status hierarchies (Hughes 1971; Lau and Murnighan 1998; Tajfel 1982a; Turner 1987), as well as self-presentation and face theory (Earley 1997; Goffman 1967; Spitzberg 1991; Ting-Toomey 1988).

## SOCIAL CONTEXT AND ROLE THEORY IN CULTURAL INTELLIGENCE

Cultural intelligence cannot be considered outside of a social context since its essence is the understanding of social behavior. This argument applies to the various elements of CQ, including the motivational component. Much like the motivation theorists seek to ground their theories in the social milieu (Bandura 1997; Locke and Latham 1990), we argue that a person's motivation to engage and understand other cultures is tied to his or her immediate social context as well as social history. By a social context we refer to the present and anticipated set of social contacts and interactions that a person will gain over time. A person's social history refers to those social contacts and interactions that have already been experienced and influence a person's existing beliefs, values, and norms.

The social history that we refer to is captured to a degree by the values that a person holds as well as his or her existing motivations. One's experiences form a partial basis for efficacy expectations, and these experiences reflect the social surroundings in which the experiences were gleaned. Social history refers to the general cultural context that a person has experienced and assimilated over time.

(Although we are hesitant to categorize some cultures as consistently having members high in CQ compared with other cultures, social history of a culture may lead individuals within one culture to have generally higher levels of CQ than individuals from another culture. Take, for example, the relative success rate of expatriate managers from various countries. Thomas [2002] suggests that the relatively lower success rates for Americans relative to other groups may reflect differential capabilities for adjustment. He cautions, however, that there may be a variety of reasons for these differential rates of adjustment reported in the literature. We agree that there are a multitude of potential reasons for differential success rates of various nationalities of expatriates, and one possible contributor is CQ. Some cultural contexts [social history] may be more conducive to the development of CQ just as some learning environments foster cognitive and intellectual development. At this juncture, it seems safe to argue that CQ is a contributing factor to cultural adjustment and has its basis in one's cultural heritage and background.)

Social history influences the motivational aspect of CQ through the shaping of personal values, self-efficacy, and self-generated goals. With regard to personal values, it is nearly axiomatic to say that developmental experiences provide the foundation for values and how one evaluates something such as experiencing new cultures. A personality factor, such as openness, is clearly based in a person's social history and the values endorsed. People having strong values surrounding group dependencies, social hierarchies, shared identity, and so forth, are likely to have a particular orientation for social adjustment and CQ. This mapping of social history onto predilections for intercultural understanding is not as straightforward as one might imagine at first. A person coming from a highly collective and hierarchical culture is likely to have had numerous experiences requiring sophisticated social interactions based on potentially subtle cues (for example, Japanese culture). Issues of personal status (face), achievement, and recognition are critical to maintaining the social fabric of such a culture. Does this mean that a successful person from this cultural background has a strong motivational aspect of CQ? Not necessarily. The difficulty is that it might be argued that the relatively stable nature of in-groups in a collective and hierarchical society (Triandis 1995) leads people to learn one particular way of dealing with others. Admittedly, they are very good at using the subtle cues from their particular social group and are sensitive to these cues in a way far superior to an outsider. But this does not mean that they can generalize these skills to new cultural groups. Whether such skills are generalized to other cultural settings remains to be established.

Social history is related to the self-consistency motive (Erez and Earley 1993) as well. A person having a high self-consistency motive tends to link the past with the present and future so as to maintain continuity of self-concept, memories, values, and so on across time. For such an individual, social history and preexisting values will play highly central roles in shaping motivational CQ. Such a person will rely heavily on interpreting new information in terms of preexisting ideas and perspectives. Likewise, new situations encountered are likely to be discounted or adapted if they appear inconsistent with existing worldviews.

In addition to the social history of an individual, a critical feature is the existing social context of a person. That is, what are the key features of the current environment that would influence a person's motivation level of CQ? First, the roles that a person experiences in an intercultural interaction are critical for understanding CQ motivation. For example, a worker from a collectivist culture has a higher identity commitment that reflects the interests of her in-group regardless of its position with the organizational structure. A cultural value that favors high power-distance relationships can support a worker's commitment to subordinate roles, facilitating the use of simple or bureaucratic control (Earley and Laubach 2000).

According to Social Identity Theory (Tajfel 1982a) and its related framework of Self-Categorization Theory (Turner 1987), there are three levels of abstraction of self: superordinate level of the self, based on one's identity with the common features one shares with other human beings; intermediate level on in-group–out-group categorizations based on social similarities and differences between human beings that define one as a member of certain social groups; and subordinate level of personal self-categorizations based on differentiations between oneself as a unique individual and other in-group members. The salience of any level of self-categorization varies with the frame of reference. There is an inverse relationship between the salience of the personal and social levels of self-categorization. The former emphasizes the unique and distinguishable characteristics, whereas the latter emphasizes the similarities and commonalties with other group members.

An individual's self-image will be enhanced as a result of intergroup comparisons. That is, by comparing one's own social groups to others and evaluating them in a negative way, one bolsters one's personal sense of worth (for example, look at how good one is in comparison with others).

A related aspect of identity theory concerns the process explanation concerning why individuals demonstrate an in-group favoritism as demonstrated by Tajfel and others. (This desire to explain the underlying process of intragroup behavior gave rise to Turner's Self-Categorization Theory.) According to Turner (1985, 78), self-categorization theory "is concerned with the antecedents, nature and consequences of psychological group formation: how does some collection of individuals come to define and feel themselves to be a social group and how does shared group membership influence their behaviour?" Categorization theory focuses on the underlying cognitive aspects of why social identity comes to pass and it proposes that (1) self-concept is the fundamental component of a cognitive system; (2) an individual's self-concept has many interrelated facets; (3) particular facets of the self are activated by specific settings; (4) cognitive representations of the self take the form of self-categorizations; (5) these self-categorizations exist as part of a hierarchical system; (6) self-categorization occurs at a minimum of three abstraction levels, namely, human versus nonhuman, in-group versus out-group, and personal self-categorizations that define and differentiate individual group members from one another; (7) self-categorizations at any level tend to form and become salient through comparisons of stimuli defined as members of the next higher level of self-category; (8) the salience of self-categorization leads to an accentuation of intraclass similarities and interclass differences; and (9) there is a functional antagonism between the salience of one level of self-categorization and other levels such that the salience produces perceived intraclass similarities and interclass differences at other levels as well. Further, Turner argues that individuals are motivated to maintain a positive self-evaluation of self-categories through a comparison of self and other member characteristics with prototypes of the next higher level of categorization.

Categorization theory has several interesting features that can be used to describe cultural influences (Erez and Earley 1993). Turner argues that group formation occurs for several reasons. First, groups can form as a result of spontaneous or emergent social categorizations from the immediate situation. Second, they occur as a result of some preformed, internalized categorization scheme available from cultural sources such as work class, gender, race, and so on. Although Self-Categorization Theory (SCT) does not predict the importance of particular cultural bases with regard to group formation, Erez and Earley suggest that such a categorization proves to be very important in understanding group behavior in culturally heterogeneous groups. The basic premise that individuals use preformed categories in forming in-groups, as well as making judgments about out-groups, is important for understanding group processes in various cultures.

Another limitation of categorization and social identity approaches to understanding the impact of social context on motivational CQ is that group memberships appear to be largely based on psychological processes of individual attachments to others as if group membership is entirely volitional (Earley 1997). Such an individualistic view may not accurately capture group memberships in more collectivistic cultures since group membership is largely dictated by cultural norms in collective cultures (Smith and Bond 1998; Triandis 1995). These memberships are both preformed and stable, so the group formation process described by categorization theory may be limited. The salience of the categories and their inclusiveness may vary as well across cultures. For the individualist, group memberships may be fleeting so categorizations of in- versus out-group may be ill-defined. An individualist asked if a friend constitutes family may be uncertain and judge the friend in terms of many characteristics before deciding. A collectivist asked a similar question may respond with an immediate affirmation because her categorization of in-group is more restrictive and well-defined.

What are the implications of role and social identities to the motivational aspects of CQ? The role identities that people adopt are critical for understanding several aspects of their cultural adaptability. For example, if one's role identities are very limited and heavily overlapping such as might be the case for a hierarchical and collective culture that is small in population (Culture A), then one's motivation for adjustment may be very limited for new cultures that one initially perceive as highly divergent from one's own. That is, one is not terribly compelled to understand these "foreigners" because one will not seek them out as a potential referent for self-enhancement (they don't function as a relevant reference group). At the other extreme, if one's role identities are very complex and interdependent such as may be found for a dynamic culture undergoing significant technological transitions (Culture B), then one will be highly motivated to understand new cultural contexts since this is what one needs to do in everyday life to cope with change. The values that one holds are a result of particular social context (continuing with these two examples), and this dictates, in part, how one evaluates various decisions concerning cultural adjustment.

This evaluation process interacts with the goals and expectations that a person has about adjustment as well. In Culture A, motivation to understand a new Culture (X) will be a function of the perceived similarity with this culture and how knowledge of Culture X might be personally useful. If Culture X is perceived as highly dissimilar, or not instrumental for Culture A's advancement, then motivation will wane. A person's motivational CQ will vary as a function of personal efficacy based on prior experiences (social history). Someone from Culture A is less likely than someone from Culture B to move across in-groups and vary his or her loyalties. This suggests less experience as well, so efficacy is likely to be lower, personal goals may be vague and poorly defined, challenges will be met with weak commitment, and so on.

The social setting of a hierarchical and collective culture may result in a highly motivated individual as well as an isolationist perspective. Take, for example, Hall's description of his hotel moving experiences in Japan that we described in Chapter 3. Despite having a strong collective and hierarchical orientation, Japanese culture does not consist of only a few salient role identities to which members belong. To the contrary, the elaborate stratification of role identities (for example, member of a family, extended family, community, work unit, organization, sector, and so on) and their interdependence suggests that they are highly motivated to understand other cultures as long as members from the target culture are viewed as a source of status and placement (Earley 1997; Ho 1976; Hu 1944). We argue that such individuals are likely to be motivated, at least initially, to understand other cultures because they do not know who is a source of personal status. People who have a strong sense of "*lian*," or moral character (Earley 1997), may be inclined as well to understand a new culture since they are concerned with their personal conduct and its implications for others. When it comes down to it, people who are concerned with face regulation (maintenance and enhancement) are likely to be high on motivational CQ. These people have an instrumental need to understand a new culture that they will need to function in. That is, the only way to really ensure that a person can maintain or enhance their position in a new culture is by a complete understanding of its functioning and rewards.

With this said, an extremely strong concern about face is likely to reflect high motivational CQ but not necessarily effective adaptation. Motivation is only one aspect of the CQ construct, and motivation as energy or enthusiasm only represents part of what we mean by motivational CQ. For motivation to contribute in a positive fashion to cultural adjustment it is necessary that efficacy and goals be in appropriate alignment to facilitate information search and interpretation. An analogy can be drawn from some work conducted by the first author with a behavioral decision theorist, Terry Connolly, and several other colleagues in a series of papers (Earley, Connolly, and Ekegren 1989; Earley, Connolly, and Lee 1989).

Earley and his colleagues investigated the role of strategic complexity (that is, the number of possible strategies available to a person for a task as well as their relative complexity) in understanding the influence of specific and challenging goals on performance. We initially found that specific and challenging goals were detrimental to performance on a complex task (stock market predictions) having many potential task strategies from which to choose. The task was an adaptation of the Lens Model approach used in decision making from the multiple-cue probability learning literature (see Earley et al. 1989, for a detailed description). Subjects were provided with three pieces of quantitative information that they needed to use to make predictions concerning the worth of a company's stock in the following market quarter. Essentially, the subjects needed to figure out the underlying algorithm that the experimenters used in the study to make effective stock predictions. Goal setting had a pronounced and positive effect on strategy utilization and strategy change, but the subjects were not benefited from this "motivation" because they lacked guidance concerning how to improve their task strategy. Thus, they seemed to have an infinitely large number of possible combinatorial strategies without a sense of how to guide their strategy search. In a follow-up study, Earley, Connolly, and Lee (1989) provided subjects with a way of guiding their search using a tutorial concerning how to "learn" about such types of tasks. The training was not how to solve the specific problem at hand—it was guidance concerning how to learn at a universal-level of the task and develop a specific task strategy as a result. This study demonstrated a reversal of the prior study and was consistent with the traditional goal-setting effects reported in the literature.

Our point is that someone who is "energized" or motivated in a traditional psychological sense has high motivational CQ, but this is not necessarily beneficial to adjustment and adaptation. If face and social status are very important to someone, he or she will be highly motivated to try and figure out the rules of status and position within a new culture. At one level, such enthusiasm seems a positive feature and beneficial. However, cultural understanding is analogous to the stock market task used by Earley, Connolly, and their colleagues in that there is high strategic multiplicity with little obvious guidance concerning how to select among these potential strategies. Goal setting and high efficacy will likely prove problematic in such a circumstance unless it is aligned with appropriate cognitive and behavioral mechanisms. For example, a high-status person who comes from a hierarchical culture to a relatively egalitarian one may inadvertently offend someone whom they view as lower status by issuing a directive with little explanation or graciousness. We have seen this type of occurrence in observing people from collective and high power-distance cultures who encounter helpers or waiters in a more individualistic and low power-distance culture. Often the visitor treats the service provider in an abrupt fashion with little regard for the server's face. The visitor assumes that the server's position does not warrant special attention and, by giving excess attention, would detract from his or her own personal status.

This mistake occurs often in the other direction as well with stories of "friendly Americans" who remove the barriers of status with high power-distance colleagues only to find that they are viewed as incompetent or lazy (high power-distance employee wonders why he is being asked for opinions about a new project—does this suggest that the expatriate is unable to make these decisions for himself? Incompetent to do so?). In one report from an American manager to the first author, he said that when he first went on an expatriate assignment to Thailand he used a very participative style of leadership and decision-making. In an effort to bring his team together, he would have meetings to encourage active disagreement and discussion among all of his management team including amongst one another. He found the team very unwilling to engage in strong debate—particularly, Thai to Thai if the ranks differed. One of his senior managers finally confided with him that several team members were concerned that the expatriate did not have full control over the situation or adequate expertise, and that this is why he was sloughing his responsibilities off onto his subordinate.

Our point is that motivation must be in alignment with cognitive and behavioral systems, and that motivation alone is insufficient to predict cultural adaptation.

## INTEGRATING THE FACETS OF MOTIVATIONAL CULTURAL INTELLIGENCE

With the exceptions of inappropriately extreme levels of self-efficacy, the influence of self-efficacy on cultural adjustment (and as a critical feature of CQ) is positive. One might ask whether individuals who have higher efficacy than is merited by their actual capabilities are at a disadvantage (getting themselves into situations that they are not really capable of handling). Bandura (1997) reviewed the literature on cognitive aspects of self-efficacy and concluded that even if such a mismatch occurs, the general benefits of efficacy on search, persistence, and so forth outweigh other potentially negative consequences. For example, Bouffard-Bouchard, Parent, and Larivee (1991) found that regardless of whether children were of superior or average cognitive ability, those having a strong sense of efficacy did better at solving conceptual problems than those children having lower efficacy. The more efficacious students at each ability level managed their time better, searched for work strategies more effectively, and were more persistent than the low-efficacy students. Schunk (1989) summarizes a series of studies on educational interventions and cognitive learning using self-efficacy. He argues that not only do efficacy beliefs form as a result of cognitive skill acquisition (for example, through instructional interventions) but it also guides the utilization of these skills.

This finding is appropriate for understanding the motivational aspects of CQ as well since the cognitive aspects alone will not enable us to understand fully cultural adaptation. Efficacy expectations both stimulate action and guide it and, most importantly, provide people who have useful strategies to use them in the correct fashion. If lacking an appropriate strategy for cultural adjustment, the highly efficacious manager will more likely develop one anew than a manager lacking such efficacy.

The immediate benefit of these goals is to guide adaptation strategies in productive directions, solidify personal commitment to adjusting, persisting in the face of failure or confusion, and so on. A related, but indirect, influence of efficacy and specific goals is an enhanced intrinsic interest in getting to know the new culture. Individuals who are efficacious and have concrete goals become more interested in understanding a new culture. Why is this? Efficacy gives rise to personal goal-setting and these goals provide oneself with a sense of challenge and excitement to accomplish them. Goal achievement itself is highly motivating and enhances intrinsic interest in what is being done (Locke and Latham 1990).

Sternberg and his colleagues' (for example, Sternberg 1997, 2000a; Sternberg et al. 1999) work concerning practical intelligence and tacit knowledge is useful once again. In his revised conceptualization of these constructs, Sternberg argues that traditional views of cognitive intelligence were lacking for a number of reasons. With regard to motivational CQ, Sternberg and his colleague's discussion of tacit knowledge seems particularly relevant. They suggest that tacit knowledge is insufficient alone to guarantee effective performance.

> Although we do not consider tacit knowledge to be a proxy for general intelligence, we do recognize that g and other factors contribute to successful performance in many jobs, based on traditional criteria of success (such as performance ratings). The performance of many everyday tasks requires general intelligence in (at least) the normative range, motivation to succeed, nontacit domain knowledge, and many other resources. (1999, 37)

The motivation to succeed is, of course, the topic of our chapter. We believe it warrants much more consideration than has been provided in Sternberg and colleagues (1999), as well as nearly all work done on the topic of general intelligence. Berry's work seems to be one of the few exceptions in which he has argued for a long time that cultural relativism in intelligence limits much of the work done in this field. He describes the relative emphasis placed on particular types of cognitive abilities and how these vary across cultures. To this we would add how the motivations that people draw from across these cultures as they deal with intelligent work vary as well.

In Sternberg's (1997) discussion of successful intelligence (built largely on his Triarchic Model), motivation plays a role in the experiential subtheory. In this subtheory, Sternberg draws from work on automatic and controlled processing (Shiffrin and Schneider 1977) and discusses the importance of task assessments that consider the level of cognitive processing required to perform a task. He argues that tasks of both a moderately novel as well as familiar nature are important for understanding intelligence. That is, intelligence that is successful not only deals well with novel tasks, it also performs appropriate application of relatively automatic ones as well. The trade-off of controlled to automatic processing involves a shifting of cognitive and motivational resources (highly novel tasks require controlled processing, high attention and cognitive resource allocation, and directed motivation; highly familiar tasks require automatic processing with concomitant lower levels of resources, attention, and effort). Motivation in relation to intelligence is reflected in the notion that intelligence requires an examination of both controlled and automatic processes. For CQ, this suggests that intelligent adaptation and adjustment is captured by the appropriate and effective application of these controlled and automatic processes. It is the regulation of attention that is guided by efficacy and goals for an appropriate balance.

Finally, the motivational aspect of CQ reflects a general willingness a person has to engage a new culture and master its nuances. This point reflects the interactive benefits of appropriate personal and cultural values, self-efficacy, and goals. A person with high motivational CQ not only values cross-cultural understanding but also sees it as a positive and motivating influence over actions. One is guided by personal challenges that one sets for oneself and is reinforced through advances in learning.

## SUMMARY

Although the general literature on intelligence has generally neglected personal motivation as part of the construct, we have introduced it as a key element since adaptation (a central element to nearly all definitions of intelligence) requires both "intelligent" and "motivated" action. Neither element is singly sufficient for cultural adaptation and adjustment.

We described our approach to motivation using the three self-motives described in the Erez and Earley (1993) Cultural Self-representation Model: enhancement, efficacy, and consistency. Further, we described how personal and cultural values, efficacy expectations, and goal setting guide a person's choice of actions in various social contexts. Values provide a general benchmark for assessing one's perceived desirability of various potential actions and outcomes. Efficacy expectations provide us with the impetus to set and pursue personal goals as well as redouble efforts in the face of potential failure. Goals provide the guidance and intrinsic challenge needed for delving into the cultural milieu.

The major challenge confronting us was to provide some legitimacy for incorporating a construct such as motivation into a cognitive domain such as intelligence. However, our strong assertion is that motivation and cognitive processing are intertwined when we consider the topic of cultural intelligence. Knowledge of domain, knowledge of procedure, or knowledge of outcome does not mean that an individual will adapt to a new culture. These "facts" only become useful if a person is appropriately motivated and guided. Interestingly, this integration of cognition and motivation has long existed within the motivation and task performance realm (for example, Bandura 1986; Locke 1968; Locke and Latham 1990). It is now appropriate for the researchers who look at intelligence to embrace fully a motivational perspective. Given the movement toward physiological processing approaches to intelligence (for example, Jensen 1982a, 1993), it is ironic that motivation is not explicitly incorporated since the electrical-chemical processing of information described in a biological system lends itself nicely to discussing motivation vis-à-vis energy potentials, synaptic pathways, and the like.

## 6

# BEHAVIORAL CULTURAL INTELLIGENCE

In the previous two chapters, we have focused on the first two of three components of cultural intelligence: the cognitive component comprising both metacognitive and ordinary cognitive schemas; and the motivational component of drive and self-efficacy. Now we turn to the third and final aspect of cultural intelligence—the behavioral component.

Overt behaviors both verbal and nonverbal expressed by two or more interacting parties represent the most salient features any social interaction. When individuals initiate and maintain face-to-face interactions, they can see and hear each other's verbal, vocal, facial, and other bodily expressions but not latent thoughts, feelings, or motivation. Because manifest features of overt behavioral expressions are so critical in everyday social encounters, the ability of any individual to appreciate the universality and cultural-specific aspects of social behaviors will be a key indicator in diagnosing and developing the behavioral component of cultural intelligence.

Cultural anthropologist Edward Hall epitomizes the behavioral school of thought in his philosophy of developing cross-cultural competencies. Hall (1993) experimented for many years with different forms of cross-cultural training at the Foreign Service Institute in the United States. Initially, he adopted an anthropological approach to training: Foreign Service personnel absorbed heavy didactic doses of declarative knowledge of culture and comparative cultural systems of foreign nations. They committed to memory the geography, history, customs, practices, kinship, family structures, and political systems of nations they were about to be assigned to.

Very quickly, Hall discovered that although foreign servicemen benefited from the general knowledge on the macro socio-cultural-political backgrounds of the foreign nations, the knowledge in itself did not prepare them in any way with key survival skills. In fact, foreign servicemen despite extensive macrocultural knowledge were behaviorally awkward, uncomfortable in cultural settings, and were at a loss as to how to present or conduct themselves appropriately in encounters with locals.

After years of experimenting, Hall concluded that he must direct his training to the requisite behavioral skills in cross-cultural self-presentation. Accordingly, Hall focused less on educating servicemen on geographical and historical facts, features, and knowledge of foreign nations, and devoted more attention to developing the social skills of foreign servicemen—social skills as mundane as greetings, farewells, beckoning gestures, initiating and carrying out social conversations or small talk, and learning the appropriate "hidden dimension" or the "silent language" of intercultural communicative behaviors in informal settings such as at meal tables and formal settings at work (Hall 1959, 1966).

Hall had stumbled on the behavioral component of cultural intelligence. We argue that culturally intelligent people must at all times be mindful of self-presentation, that is, the impressions they make, and how these behaviors can affect how locals perceive them. Self-presentation therefore represents the sine qua non of the behavioral component of cultural intelligence.

Self-presentation motives underlie and pervade social life. Whether one acknowledges it publicly, everyone harbors concerns for how one presents oneself to others (Leary 1996). As part of one's need for self-enhancement, one avoids behaviors that will lead others to see one as incompetent, maladjusted, or socially undesirable. When one finds oneself in unfamiliar cultures, no matter what else one may be doing, one wants locals in that culture to perceive one in certain desired ways. So, where the social norms can differ dramatically on behaviors as mundane as a greeting gesture, it behooves people to engage in conscious and mindful deliberation of appropriate behaviors when crossing cultures. The need for self-enhancement and one's concerns for other's impressions could further constrain one's use of daily habits and behavioral repertoire developed in one's monocultural settings.

Indeed, people acknowledge that there will be those who show little or no concern for others' impressions of them. The disregard for other's impressions may not lead to any negative consequences if cross-cultural encounters were ephemeral, such as visiting a foreign nation as a short-term sojourner or tourist. However, if individuals continue to show a lack of concern for self-presentation in longer-term sojourns in a foreign culture, they will find themselves being ostracized by locals for disrespectful and boorish behaviors. On extremes, we may conclude that people with no regard for others' impressions are socially inept, or even mentally disturbed. Technically, clinical psychologists would classify people with prolonged socially inept behaviors as “abnormal”—either as clinically depressed, schizophrenic, or autistic. Clinical psychologists or psychiatrists diagnose patients based on the unusual, out-of-pattern behaviors common to these individuals who display those conditions. Behavioral handicaps therefore become the primary symptoms of abnormal conditions. For example, autistic people tend to display several of the following characteristics:

- Absence of speech or severely impaired speech with unusual patterns, such as echoing the speech of others;
- Lack of awareness of salient cues, sounds, and objects around them;
- Indifference to being linked; little or no affection;
- Frequent behaviors that seem to provide only self-stimulation without concern for others in social settings: for example, rocking a chair back and forth incessantly or screaming incessantly or fluttering hands in front of their eyes. (Lovaas 1977)

Autistic individuals show either behavioral deficits of too little behavior or behavioral excesses or too much behavior of a particular type deemed appropriate in a certain context or both (Martin and Pear 1988). They possess language abnormalities such as echolalia by repeating numerous phrases or conversations previously heard without indicating that the words convey any meaning. They also tend to display antisocial behaviors such as obsessive-compulsive rituals (Koegel, Rincover, and Egel 1982).

Drawing on the characteristics of autism, we introduce the syndrome of “cultural autism” as it relates to cultural intelligence. In extreme forms of low behavioral CQ, an individual may display behavioral characteristics akin to autism as described above in unfamiliar cultural settings. In a situation where sojourners are unable to make sense of the shared norms and corresponding set of appropriate behaviors of the foreign culture, they may display such extreme forms of behavioral deficits or excesses to the extent that locals perceive them as displaying autistic-like behaviors.

## DEFINITION OF BEHAVIOR AND CORE ASSUMPTIONS OF BEHAVIORAL CULTURAL INTELLIGENCE

In social psychology and research in behavioral modification, behavior is defined to embrace broadly any response a person has to an external or internal trigger. According to Triandis, behavior refers to “a broad class of reactions by an organism to any stimuli (internal or external to the organism)” (1989, 201). This definition of behavior is consistent with Sarafino, who defines behavior as "anything a person does, typically in response to internal or external events" (1996, 4). An example of an external event is when a person responds to a question posed by another person in a conversation. An example of an internal event is when one takes a drink in response to feeling thirsty. Behavior, therefore, refers to the individual's specific actions or responses to either internal or external cues.

We define behavior more narrowly, and our discussion of behavioral CQ is premised on the following core assumptions. First, we focus only on *overt or external* behaviors, not covert or internal. Overt behaviors refer to actions that are amenable to observation. Overt behaviors can be described and recorded by the actor, as well as observers, individuals other than the actor. Verbal and motor behaviors represent the two most elementary forms of overt behaviors. In effect then, overt behaviors are what people say and do; overt verbal behaviors require language, while overt motor behaviors involve kinesics or body movements.

In contrast, covert behaviors are invisible to individuals other than the actors. Therefore, thoughts, feelings, dreams, and fantasies are covert behaviors. The rising irritation one feels because of the incessant construction noise from the playground is an example of a covert form of behavior. Perhaps one may have some overt facial expressions of irritation that emit from the inner emotive response, but outward signs may not always reflect covert behaviors accurately. We focus on overt behaviors, because we dealt with covert actions or responses such as thinking, feelings, and motivation in discussions of cognitive and motivational components of cultural intelligence in earlier chapters.

Second, we focus on *social* forms of human behavior—those behaviors that occur or are contextualized in interpersonal or interactional situations. We acknowledge that human beings can respond to internal or external stimuli either alone or in social settings. For example, we can eat alone or with someone else. In our discussion of cultural intelligence, we focus only on overt behaviors or responses of individuals in a social albeit different cultural setting just because culturally intelligent behaviors are inherently social in nature. We therefore concentrate only on those human behaviors that impact the social environment. Our focus on social behavior mirrors the core assumption of human behavior in social intelligence research. In social intelligence research, social behaviors are examined from a common base of socially defined meanings within a single culture (Zirkel 2000). In our formulation of cultural intelligence, we too examine social behaviors but expressed in *different* cultural contexts where actions can take on very different and even dramatically paradoxical or opposing socially defined meanings.

Third, we differentiate culturally intelligent behaviors from culturally competent behaviors. We define culturally intelligent behaviors as purposive, motive-oriented, and strategic, while culturally competent behaviors are passive, nonconscious, less agentic. A good example of a culturally competent behavior that is not culturally intelligent behavior is the "chameleon effect" in social interaction (Chartrand and Bargh 1999). The chameleon effect means the nonconscious mimicry of the postures, mannerisms, facial expressions, and verbal speech acts of one's interactional partners, such that one's behavior passively and unintentionally changes to match that of others in one's current social environment.

We can draw parallels between culturally intelligent behaviors and culturally competent behaviors and the differences between the stimulus-response (S-R) versus the stimulus-organism-response (S-O-R) paradigms in social psychology (Markus and Zajonc 1985). Individuals respond directly to external stimuli without conscious cognitive or information processing in classical behaviorists' S-R paradigms. Habits and overlearned behaviors that tend to reflect automatic, unconscious, mindless situation-behavior reflexes are examples of behaviors of the S-R paradigms (Triandis 1980; Ouellette and Wood 1998; Aarts and Dijksterhuis 2000).

The S-O-R paradigm evolved from cognitive psychologists, especially work by early animal-learning researchers such as Tolman (1935), who reacted adversely to the S-R's orientation of overly mechanistic, passive view of individuals' behavior. Cognitive theorists emphasize individuals as active processors of information received from their environments. Individuals are seen as more agentic, responding only after active processing of stimuli and cues from the environment. In effect, cognitive theorists modified the classical S-R Model to embrace the mediating "O," so that in a revised S-O-R Model, "O" represents the organism in the link between environmental conditions and responses. With the dominance of cognitive psychology and the S-O-R paradigm, most theories now acknowledge meditating cognitive processes and assume that behavior can be understood only if we explicitly theorize the intervening processes of cognitions.

Following the S-O-R paradigm, we propose that culturally intelligent behaviors refer to those behaviors that are oriented toward specific purposes or goals, and that the behaviors we observed are directive and planful. Our active definition of culturally intelligence behaviors is consistent with our formulation of cultural intelligence as intertwined components of cognition, motivation, and behavior. Specifically, we believe that the strategic, purposive motive of self-presentation governs an individual's social behaviors across cultures. People are assumed to be active, agentic, conscious, and mindful of how they act across cultures.

Therefore, we do not view nonconscious habits, or the mimicry of overt verbal and nonverbal expressions in culturally complex social situations as culturally intelligent behaviors. In fact, we may even regard a person who possesses extensive mimicking repertoires such that he or she could repeat many of the words or nonverbal behaviors of people from other cultures as more "culturally autistic" than culturally intelligent. Suffice it to say, we contend that the cultural intelligence component of behavior depends on cognition and motivation in the people's adaptive behaviors. We therefore do not regard behavior absent of cognition and motivation as particularly culturally intelligent. Culturally intelligent behaviors are external behaviors where the actors are assumed to be actively interpreting the meanings of their cultural surroundings and are motivated to appreciate, understand, and attach meanings to their responses to situational cues.

Unlike in social intelligence where personality is a key dimension (for example, see Kihlstrom and Cantor 2000), we do not include personality as part of our definition of culturally intelligent behaviors. Personality characteristics refer to traits that describe broad and stable characteristics of an individual. In common parlance, we may describe someone's behaviors in personality or trait-like characteristics rather than in specific behaviors. For example, we may describe someone's behavior as "conscientious" as a shorthand and efficient way of conveying what we mean when we observe that the person shows specific behaviors such as always keeping promises, delivering work done promptly, and maintaining a neat, clean office. In our conceptualization of CQ, behaviors are not the same as personality traits; personality is not a defining characteristic or indicator of cultural intelligence. In the broader nomological network on cultural intelligence, personality characteristics are conceptualized as antecedents or causal agents of cultural intelligence.

We do not embrace outcomes of behaviors as part of the definition of behavioral CQ. Researchers in behavioral modification distinguish clearly behaviors from outcomes of behaviors (Azrin 1973; Miltenberger, Fuqua, and Woods 1998; Prochaska, DiClemente, and Norcross 1992). For example, a person who wishes to lose weight (a behavioral outcome) will require specific behaviors of regulating how much one eats and how much one exercises, and not about how much one weighs, per se. Similarly, in the context of cross-cultural settings, one may have different purposes or objectives of sojourning—foreign students studying in a host nation may wish to improve their grades, or expatriates may wish to achieve the goals of multinational corporations. Having high grades or successful expatriation are examples of behavioral outcomes and are consequences of culturally intelligent behaviors. They are not culturally intelligent behaviors in themselves. Getting high grades will require specific behaviors of devoting hours of studying, or researching in the library, and conducting field projects. Successful expatriation in terms of accomplishing objectives of multinational corporations (MNCs) will require specific behaviors, such as interacting with locals in a culturally sensitive manner, influencing and getting things done that are compatible with the values of the local culture, and managing and navigating self in a foreign culture. Individuals who focus their efforts only on behavioral outcomes often fail to identify and deal effectively with the specific behaviors they need to achieve those outcomes.

We hold the view that although universals of human behaviors exist at a broad level, the specific meanings and expressions of these behaviors still do differ across cultures. Universal behaviors refer to actions and human responses that occur in all cultures (Lonner 1980; Triandis 1978). Historically, the search and evidence for universals in human behavior dated back to the nineteenth century when Charles Darwin conducted an extensive survey of key administrators, missionaries, and explorers and identified a range of universals of emotional expressions of human behaviors (Izard 1994).

Since then, researchers in human ethnology, the study of the biology of human behavior (Eibl-Eibesfeldt 1989), and cultural anthropology have accumulated substantive evidence of universals in human behaviors (D. Brown 1991). For example, Murdock (1968), the developer of the ethnographic thesaurus for the Human Relations Area File (HRAF), discovered a significant number of universals of behaviors. These universals including behaviors as wide-ranging as cooking, cooperative labor, courtship, dancing, dream interpretation, etiquette, feasting, gift giving, greetings, joking, trade, visiting, and numerous others.

Although these behaviors are universal in that they occur in all cultures, the specific meanings and expressions of these behaviors do differ across cultures. For example, Triandis (1978) identified three pairs of contrasting macrosocial behaviors that transcend cultures: *associative* (helping, admiring, sexual) versus *dissociative* (avoiding, aggressive) behaviors; *superordinate* (domination) versus *subordinate* (conformity, obedience) behaviors; and *intimate* (self-disclosure) versus *formal* (behaving as required by decorum or etiquette) behaviors. Yet, at the same time, the specific behaviors in each of these macrocategories could carry very idiosyncratic meanings and unique expressions that render the presentation of self and interpretation of observed behaviors challenging in cross-cultural interactions. For example, intimate behavior may be universal behavior; but how intimate behavior is manifested or expressed can and does differ from culture to culture.

Similarly, there are universal and corresponding culturally specific aspects of more microbehaviors present in social interactions. Specifically, a significant amount of research has focused on emotional expressions and emotional recognition within and across cultures on both specific positive emotions (for example, happiness, contentment) and negative emotions (for example, anger, sadness) to assess the relative degree of universality and cultural specific variations in emotional behaviors that exist in cross-cultural encounters (Ekman 1972, 1999; Elfenbein and Ambady 2002; Fiske, Kitayama, Markus, and Nisbett 1998; Izard 1994; Mesquita, Frijda, and Scherer 1997).

As a case in point, Schiefenhovel (1997) discovered that although laughter is universal in evoking prosocial mood, depending on how one laughs, the act of laughter can be misinterpreted and misconstrued as nonprosocial. At an extreme case, laughter expressed with an open mouth and bearing teeth may be misconstrued as clumsy, uncouth, and even slightly aggressive behaviors in some cultures. In sum, we believe in the universality of social behaviors. However, these universal social behaviors occur only at a very high level of abstraction or broad categorization. When one examines any social behavior in some depth, the behavior becomes increasingly culturally specific—the manifestation and meaning attached in social behaviors will differ significantly across cultures. Accordingly, we would expect a culturally intelligent individual to possess the ability not only to recognize the universality of social behaviors at the highest level of abstraction, but also to discern and express the subtle nuances in behaviors required in cross-cultural encounters.

## THE THEORY OF SELF-PRESENTATION AND SOCIAL BEHAVIORS

The process of controlling how people perceive oneself is called self-presentation or impression management (Schlenker 1980). Self-presentation therefore refers to the process that individuals use to influence purposively the beliefs and feelings others hold toward them. The concept has attracted considerable research among sociologists, most notably Goffman (1959) and social psychologists, including Edward Jones, James Tedeschi, Barry Schlenker, and Roy Baumeister.

Goffman, in his book on the *Presentation of Self in Everyday Life* (1959), discovered that social behaviors are best understood more by careful scrutiny and systematic observation of public appearances people create for one another, and not by probing inner motives or personalities. To study public appearances, Goffman adopted a dramaturgical approach, embraced the powerful idea of "life as drama," and used metaphors from the theatrical arts, including concepts such as acts, ropes, props, and audiences to convey the pervasiveness of self-presentation of social behaviors in everyday life.

According to Goffman, effective social interaction requires interacting parties to know each other well. Preferably, one should know about one another's socioeconomic status, attitudes, competence, personalities, and so on. Yet, people often find it difficult to learn much more about others, especially when they are meeting only for the first time, and when their interactions are brief. Because daily encounters with fellow human beings are short and often with mere acquaintances, Goffman contended that people tend to scrutinize others' public images rather than probe into their covert attitudes or personalities. In fact, when one knows very little of others' personalities or individual backgrounds, one simply relies on the public images others convey. Accordingly, people form judgments and perceptions of others based on public images, hence the importance of self-presentation in social behaviors.

In social psychology, self-presentation is particularly important in *social* behaviors because behaviors enacted in the process of social interaction are motivated primarily by the need for impression management and self-presentation (Leary 1996). In fact, social psychologists would argue that few aspects of people's behavior are unaffected by self-presentational motives. We believe other forms of cognitive and motivational structures and processes, such as self-representation or metacognitive cultural schemas, do affect social behaviors. However, we also argue that even when people's behaviors across cultures are motivated by these other motives, they typically pursue those goals with an eye toward self-presentation; that is, they will pursue those goals in ways that will not jeopardize their image in others' eyes.

For example, a person may eat at the cafeteria in a foreign land. His or her primary goal is to satisfy hunger while self-presentation of him- or herself to others in the foreign culture is of a lesser or secondary concern. Even so, he or she is likely to eat in such a way so as not to offend others or fellow colleagues in that culture. So, for example, if he or she is in a culture that frowns on eating with fingers, he or she may switch to using a folk and knife when eating in the social presence of locals than when eating alone in his or her apartment. By changing eating behaviors, he or she would have pursued the goal of satisfying hunger in a way that will not create unnecessarily bad impressions of his or her public image in that culture.

The theory of self-presentation therefore asserts that people rarely intentionally do things that make them appear incompetent, unattractive, or socially undesirable. So, even when people are doing other things and impression management is not the primary goal, their behavior is usually constrained by concerns with others' impressions. Self-presentation hence places constrains within which most other behaviors occur.

To date, self-presentation research offers strong evidence linking self-presentation motives with the regulation and production of social behaviors. Leary (1996) in his comprehensive review shows the pervasiveness of self-presentation motives underlying many universal social behaviors, including prosocial, aggression, domination, conformity, and others.

In addition to focusing on the positive aspects of self-presentation, social psychologists have also focused on the impact of poor self-presentation on social interaction outcomes. Generally, people who are unconcerned with others' impressions often behave inappropriately, resulting in negative reactions ranging from disparagement to ostracism. As Leary illustrates:

> They might laugh at funerals, wear swimwear to the office, or never bathe. They certainly wouldn't try to put their best foot forward when the situation called for it. As a result, they would have serious difficulties. . . . Even if initially successful, the tactless person who never impression-managed would have trouble keeping jobs, friends, and lovers. (1996, 2)

## CULTURE, SELF-PRESENTATION, AND SOCIAL BEHAVIORS

Based on the theory of self-presentation, we believe that the concern for self-presentation is the crux of behavioral cultural intelligence. Brissett and Edgley (1990) showed that people often enter into a conscious state of "dramaturgical awareness," and their concern for self-presentation heightens when they interact with strangers or find themselves in novel social encounters. Cross-cultural encounters are typically short and are likely to be with strangers or mere acquaintances rather than with friends or intimates. As a result, there is very little shared meaning or common heritage between interacting parties. A concern for self-presentation then becomes greater under such circumstances since a conscious state of dramaturgical awareness will enable people to be more mindful of how their behaviors will affect cross-cultural strangers or acquaintances and guide the way they express themselves.

When one interacts across cultures, the cultural norms that typically constrain behaviors can vary so dramatically such that behaviors deemed appropriate in one culture may not naturally reflect the same meaning or level of propriety in another (Montagliani and Giacalone 1998). When that happens, interactions become extremely challenging because there may not be common rules, standards, or shared meanings governing cultural encounters. More often than not, interactions are thwarted by miscommunication, misattribution, misperception, and misevaluation by the interacting parties (Giacalone and Beard 1994). In part, people from different cultures observe the same behavior but misunderstand the intentions of that behavior. Therefore, misattribution may arise because the rules of sense making may differ between interacting parties. For example, open confrontation is an acceptable form of conflict management in Western societies but is shunned as rude and inconsiderate in Asian cultures.

Therefore, a person may behave in a certain way to convey a certain impression, yet find that persons from another culture have an entirely different impression from the one he or she intended. A carefully calculated impression (that is, the impression that a person wanted others to form) then becomes a secondary impression (the impressions that the person did not intend others to form [Schneider 1981]).

One way to examine how self-presentational norms vary across cultures is to know and understand the cultural value hierarchies of different societies (Bond 1991). For example, in a culture that highly values conformity, people will pretend to agree more than they really do. They will use a large number of moderating adverbs (for example, words such as "slightly," "perhaps," "maybe") to qualify their statements and avoid taking strong positions against the group. In contrast, in a culture that places self-direction high on the hierarchy of values, people are more willing to express their true opinions and emotions.

To conclude, first impressions and self-presentation count even more in cross-cultural encounters because these encounters are often brief, short-lived, and with strangers of a different cultural heritage. To be sure, CQ-astute individuals must be especially aware of the impressions they convey to others. Also, they must possess the requisite repertoire of behavior skills and impression management tactics to adapt to alternative cultural settings that reflect different hierarchies of cultural values.

## Variations in Social Behaviors Across Cultures

In our earlier discussion of core assumptions concerning behaviors, we noted that broad, universal social behaviors exist. These include associative, dissociative, superordinate, subordinate, intimate, and formal types of social behavior (Triandis 1978). However within these universal sets, we often observe wide displays of behaviors across cultures. To understand why patterns and meanings of specific behaviors differ across cultures, we need to understand how people construct, understand, respond to, evaluate, and coordinate social relationships. Fiske's (1991) framework of social relations offers one such understanding.

Fiske presents four elemental ways people structure their social relations, including social motives, thoughts, and values that could be used to explain patterns of cultural variations in social behaviors. According to Fiske (1991), the four elemental forms of structuring reflect four basic rules: sharing in communal sharing (CS); hierarchy in authority ranking (AR); equality in equality matching (EM); and proportion in market pricing (MP).

Communal sharing (CS) occurs when parties in the social relation "merge so that boundaries of the individual selves are indistinct" (Fiske 1991, 13). Under this, group identity comes before individual identity; individuals seek consensus and unity; and they experience strong solidarity and collective responsibility to the group. Communal sharing does not condone individual ownership. Property is common and there is no tracking of what one gives to the common group. For exchange, the motto "what is mine is yours" governs ownership. Therefore, people pool their resources, giving what they can and taking what they need.

In authority ranking (AR), parties accept an asymmetrical relationship in the social relation. AR is a relationship of inequality with parties in the social relation ranked hierarchically. In particular, dominance rests with the highest-ranking person in a social relationship. For exchange, superiors, those individuals of higher status, are conferred the prerogatives of choice and preferences whereas subordinates or individuals of lower status receive less and get what is left over. In work relations, superiors direct and control the work of subordinates, while subordinates display loyalty and deference to superiors. Nevertheless, the relationship is never too lopsided—superiors are expected to be paternalistic and to undertake responsibilities to provide for subordinates

In equality matching (EM), social relations are governed by egalitarianism and reciprocity. People possess individual identities—they are separate but equal. Unlike in the case of CS and AR, individuals in EM relations do not share according to what they need, or according to hierarchical status, but they share equally. The essence of EM is therefore equality and equal sharing. In EM, one person gets one vote, and everyone has equal say. Also, in EM, there are strong norms of returning favors, of taking turns to decide, or forming equal-status peer groups. Fairness is achieved through strict equality, equal treatment, and balanced reciprocity.

Finally, market pricing (MP) describes a pattern of social relations governed and mediated by a market system. In MP, people denominate value of exchange in a single universal metric derived from the marketplace. Specifically, people value other people's actions, services, and products according to the rates at which they can be exchanged for other commodities. In effect, the key feature of MP is the criterion of proportionality; actions are based on rational cost-benefit analysis. You pay or exchange for commodities in proportion to what is received and as a function of market price or utility. In terms of contribution, people are assessed according to a fixed ratio or percentage. The more you give or contribute, the more you get. Actions are therefore pegged to a value by an external pricing or market system, which in turn is governed by overall supply and demand or expected utilities.

Although all four forms of social relations do occur in all cultures, there are strong associations between elementary forms and cultural syndromes. In particular, Triandis (1994) observed that collectivist cultures tend to invoke rules of CS and AR more than those of EM or MP, while individualistic cultures tend to employ the reverse. In the more recent reformulation of cultural syndromes, Singelis, Triandis, Bhawuk, and Gelfand (1995) mapped the four cultural value systems of vertical and horizontal forms of individualism and collectivism to the four elementary forms. Horizontal collectivism corresponds to communal sharing; vertical collectivism to authority ranking; horizontal individualism to equality matching; and vertical individualism to market pricing.

Because different bases of sharing, hierarchy, equality, or proportion govern social relations, and because cultures emphasize different bases or combinations of these bases, we would expect patterns, meanings, and interpretation of social behavior to differ across cultures. To explore how culture can impact social behaviors, we have selected a pair of contrasting social behaviors: prosocial as associative behaviors, and aggression as dissociative. These behaviors are in no way comprehensive. For a more comprehensive treatment of other categories of social behaviors, Triandis (1994) and Lonner (1980) offer an excellent review.

## CULTURE AND ITS IMPACT ON PROSOCIAL BEHAVIOR—AN ASSOCIATIVE FORM OF BEHAVIOR

Prosocial behaviors are regarded as associative in nature because they represent behaviors that are aimed at benefiting others. In general, there are many factors that determine prosocial behaviors. These include personal determinants such as individual differences in altruistic personality (Batson 1991; Batson and Shaw 1991), gender (Eagly and Crowley 1986), mood (Salovey, Mayer, and Rosenhan 1991), and situational determinants such as rural versus urban environments (Hedge and Yousif 1992), and the bystander effect (Latane and Darley 1970).

In addition to these determinants, culture also plays a dominant role in determining prosocial behavior. Drawing on Fiske's elementary forms of social relations, we will expect less helping in situations where the social relation is defined by an independent orientation of the self rather than an interdependent orientation. Therefore, if the social relation is characterized by market pricing or equality matching, where people see themselves in the relation as more individualistic than by communal sharing or authority ranking, where people see themselves as more collectivistic and connected to others, we would expect less helping in MP or EM rather than CS or AR relations.

In the study of prosocial behavior, much empirical research has focused on the assumption that the social relation between the helper and receiver is one of an exchange relationship. In the context of Fiske's forms of social relations, exchange relations will either be market pricing or equality matching. Exchange relationships are governed primarily by concerns about equity—that what one puts into the relationship equals what one gets out of it. An example of helping in an exchange relationship will be if I were to assist you in painting your house, I would expect you to assist me in putting up a fence in the garden.

More recently, Clark and Mills (1993) have proposed an alternative—the communal relation to understanding prosocial behavior. In the context of Fiske's forms of social relations, exchange relations will govern communal sharing. Clark and Mills contend that when one perceives the social relationship to be exchange but communal, the focus is not on the governing rule of equity. People in communal relations are less concerned with the benefits they will receive by helping, but more with simply wanting to ensure that the needs of the other person are satisfied. Therefore, helping in exchange relationships is governed by rules and norms that differ from those governing communal relationships. In exchange relationships, people are concerned more with who is getting what. In communal relationships, people are concerned less with who gets what and more with how much help the other person needs and how to ensure those needs are satisfied. In other words, the person in need is the focal point of communal relationships while what one gets in return is the focus of attention in exchange relationships.

Another important cultural determinant of helping behavior is the idea of in- versus out-group. In-group refers to a group with which an individual identifies and feels he or she is a member. In contrast, out-group refers to a group with which the individual does not identify. It is important to note that it is pancultural for people to help someone whom they perceived as a member of an in-group than if he or she were a member of the out-group (Brewer and Brown 1988). Culture plays a role in determining how strongly people distinguish members in the in- versus out-group. In interdependent cultures, greater importance is attached to the needs of the in-group. As a result, members are more likely to help in-group members than members in individualistic cultures. However, because the distinction between "us" and "them" is stronger in interdependent cultures, people in these cultures are less likely to help members of out-groups than people in individualistic cultures (L'Armand and Pepitone 1975; Leung and Bond 1984). Therefore, to get help, it is very important to be viewed as a member of an in-group, and this is especially true in interdependent cultures.

A culturally intelligent individual when faced with a prosocial situation of giving or receiving help needs to be mindful of and appreciate the nuances of in-group/out-group differences and to discern whether he or she is a member of an in-group or out-group. Furthermore, before embarking or receiving prosocial behaviors, the individual must also be mindful of distinguishing the social relation of helping as exchange or communal so that he or she can have the right kinds of expectations and respond appropriately to the act of helping.

## CULTURE AND ITS IMPACT ON AGGRESSIVE BEHAVIORS— A DISASSOCIATIVE FORM OF BEHAVIOR

In contrast to prosocial behaviors, which are associative in nature, aggressive behaviors exemplify dissociative behaviors. Dollard, Doob, Miller, Mowrer, and Sears (1939), in their classic studies on aggression, define behaviors with the goal of injuring the person toward whom the behaviors are directed. Aggression unquestionably refers to any action that intentionally inflicts harm on one or more other persons (Segall, Dasen, Berry, and Poortinga 1999, 251). Aggression as a behavior is pervasive (Campbell 1975). Goldstein and Segall in their comprehensive review on aggression showed that although aggressive behaviors could vary dramatically in incidence across cultures and nations in some societies, aggressive acts permeate across all societies (Goldstein and Segall 1983). In other words, all cultures can identify certain acts of social behaviors that are deemed injurious to another person, and societies have evolved practices and enacted laws to control aggression.

Although aggression is a universal act, the judgment of what constitutes aggression does vary across cultures. To illustrate, in their extensive hologeistic research on violent behavior, Ember and Ember (1993) avoided labeling homicides and assaults as "criminal" behavior because definitions of crime vary widely from one culture to another. For example, infanticide or abortion can be regarded as a crime and an act of violence in one culture but is perfectly legitimate in another. Other acts of aggression, such as wife beating or killings, also engender controversy in terms of operationalizing the meaning of aggression across cultures (Segall, Ember, and Ember 1997).

In other research, Tedeschi, Smith, and Brown (1974) and Tedeschi and Melburg (1983) argued that in some cultures, some aggressive behaviors are in fact sanctioned by the societies. In particular, some aggressive behaviors are even respected as legitimate attempts of exercising social control via coercion. For example, Bond, Wan, Leung, and Giacalone (1985) found that verbal insults delivered by a superior to a subordinate in Hong Kong (where the power distance is high) were deemed acceptable and not considered aggressive, whereas the same verbal insults occurring in the United States (where power distance is low) will be regarded as aggressive. This is because in cultures with high power distance, status differentials favor the superior; therefore, insults delivered from an acknowledged superior to a subordinate are seen as a legitimate exercise of authority and not as aggression. Thus, the same act may be denounced as aggressive in one culture but sanctioned in another.

Therefore, a culturally intelligent individual, when faced with an aggressive situation, needs to be mindful and regulate self-presentation with respect to aggression. As a matter of fact, viewing aggression from an impression management perspective is not new. For example, Felson (1978) found that individuals may strategically invoke aggressive behaviors to preserve a certain self-image and to save face. Specifically, Felson (1982) found that males in the United States are most apt to express anger when they are recipients of insults from same-sex peers and in the presence of onlookers.

By understanding how culture can vary the judgments of aggressive behaviors, a culturally intelligent individual must also learn to decode acts of seeming aggression across cultures. Given that aggressive behaviors can have culturally specific meanings, one may wish to enact aggressive behaviors under certain circumstances to present, sustain, or retain certain self-images.

## VERBAL AND NONVERBAL BEHAVIORS IN INTERCULTURAL COMMUNICATION

Besides examining social behaviors broadly as associative-dissociative, formal-intimate, or superordinate-subordinate, we can also analyze social behaviors across cultures at a more micro-, interpersonal, and interactional level. The corpus of knowledge and study of verbal and nonverbal behaviors in cross-cultural encounters lies in the intercultural communication research generated by ethnolinguists, sociolinguists (Gumperz 1982; Scollon and Scollon 1995), and social psychologists (Gudykunst and Kim 1984; Wiseman 1995). The primary aim of research in intercultural communication is to reduce or attempt to eliminate any misunderstanding that might result from cultural misinterpretations in intercultural encounters.

Intercultural communication refers to interpersonal interaction between people of different cultures or shared bodies of knowledge. Intercultural communication occurs when one person comes from one culture and the other from another. Typically in an intercultural communication, people will encode and decode based on their own cultural background and framework. Therefore unless the cultures are relatively similar, intercultural communication can pose great challenges. If the cultures of the interacting parties are very diverse in language, values, and belief systems, then interacting parties will experience a great deal of difficulty communicating.

## CULTURE, LANGUAGE, AND LINGUISTIC BEHAVIORS

In cross-cultural encounters, often one or more parties speak in a language that is not their native language (Krauss and Chiu 1998). Foreign-language competency therefore becomes critical in intercultural communication (Gudykunst and Bond 1997). In addition to facilitating communication, a mastery of foreign languages also mediates between different cultural identities within one person (Northover 1988). In particular, a person possessing different foreign languages will have access to cultural knowledge, beliefs, and values beyond one's native language or language of origin.

Much research has been devoted to speech pragmatics across cultures because speech pragmatics can vary dramatically across cultures (Hall 1976). Speech pragmatics refers to the study of the use of language in communication, particularly the relationships between sentences and the contexts and situations in which they are used. Practically, speech pragmatics examines how the speakers use and understand speech acts, how the structure of sentences is influenced by the relationship between the speaker and the hearer, and how the interpretation and use of utterances depends on the knowledge of the real world (Levinson 1983).

Hall (1976) also discovered that the directness of speech acts, particularly the content or linguistic discourse, varies depending on whether the culture is characterized as high or low context. A low-context culture is one where speech is explicit and meanings are taken literally. Therefore, the message intended is conveyed primarily by the words spoken alone. In contrast, a high-context culture is one where meanings are implicit and words spoken convey only a small part of the message. The whole meaning of the message therefore needs to be inferred by the listener depending on contextual cues such as setting of the particular conversation and past knowledge of the speaker. Gudykunst, Ting-Toomey, and Chua (1988) found that high-context cultures correspond to collectivistic cultures whereas low-context cultures map to individualistic cultures.

In individualist cultures, the discourse is direct, succinct, personal, and instrumental, whereas the discourse in collectivist cultures is contextual, with affective emphases and the use of more qualifiers including "maybe," "perhaps," "probably," and "slightly." Kim and colleagues (1996) and Gudykunst, Goa, and Schmidt (1992) found that individualistic cultures with an independent self-construal tend to value clarity in communication. Therefore preciseness and direct messages are heralded as hallmarks of effective communication. Collectivistic cultures with interdependent self-construals sought the goal of not imposing or hurting others, hence the use of more indirect messages and allusive forms of communication.

The directness versus indirectness of speech acts that characterize individualistic versus collectivistic cultures has numerous ramifications on other linguistic-cultural differences. Blum-Kulka, House, and Kasper's (1989) large-scale field project on cross-cultural speech acts shows that cultural preferences exist for particular forms of realizing requests, demands, refusals, apologies, justifications, compliments, thanks giving, face-threatening, and face-saving. For example, in the West, it is customary to accept compliments with a thank you, whereas in Eastern cultures, the social norm is to a polite refusal or deflection of the compliment (Wolfson 1981).

## CULTURE, PARALANGUAGE, SILENCE, AND VOCAL BEHAVIOR

Paralanguage is present whenever people engage in verbal behavior. They refer not to the words or the message content of speech but to the sounds made, the lexical diversity, the tone of voice, rate of speaking, variety of inflection, and overall loudness of vocal behavior (Giles and Street 1994; Smith and Shafer 1995; Street and Brady 1982; Street, Brady, and Putnam 1983). For example, observers can draw inferences from the tone of voice used by an actor in making a suggestion. The message content of the suggestion together with speech cues can convey considerable information about the actor's intent, affect, and cognitions.

Research in paralanguage focuses on three broad voice characteristics: voice quality, vocalization, and vocal qualifiers (Victor 1992). Vocal quality refers to dimensions such as agility, articulation, resonance, and power (Appleman 1967; Baken and Orlikoff 1987; Colton 1988). In some cultures, vocal power and resonance are revered, while in other cultures, demonstrative vocalic tones convey perceptions of arrogance and rudeness to other cultures (Richmond, McCroskey, and Payne 1991). Vocalization refers to the use of nonword fillers such as "ahem," "uh-huh," "um," "er," "you know," "okay," clicking one's tongue, or sucking in one's breath. In terms of speaking, some cultures hiss or inhale one's breath while talking to others as a sign of showing respect and giving the other person time to think. In other cultures, actors used more pauses in the speech acts to allow the listener to process. The frequency of use and the meaning of each type of vocalization therefore varies across cultures and can interfere with cross-cultural communication especially when the actor vocalizes or uses fillers beyond the cultural norms of appropriate frequency.

Vocal qualifiers refer to the pitch, overall intonation of the spoken word, and even silence (Richmond, McCroskey, and Payne 1991). In general, in the low-context cultures silence is deafening; it indicates absence of communication, downtime, and is interpreted as communication that has gone wrong. In low-context cultures, therefore, people are evaluated positively the more they talk and participate in the act of expressive word articulation (Beamer and Varner 2001). In high-context cultures, on the other hand, silence is preferred to conversation. Silence is seen as a way of showing respect, of not disagreeing openly, as a way of contemplation on the problem at hand, where speech interferes with deep thoughts and cognitive processing. Silence therefore could serve a variety of functions. Depending on the cultural interpretation of silence, silence may serve to create greater interpersonal distance, to punish others, to avoid embarrassment of others, or, at times, to show respect for others.

## CULTURE AND PARALINGUISTIC BEHAVIORS

Although verbal behavior is important in cross-cultural communication, much of the communication also takes place with paralinguistic or nonverbal cues (DePaulo and Friedman 1998; Klopf and Ishii 1984; Krauss and Chiu 1998). A person's nonverbal behavior communicates the beliefs, attitudes, and values of that person's culture to others. No doubt misunderstanding can occur at the level of the message based on the content of the verbal behavior, but misunderstanding can also occur at the level of the *metamessage*, that is, the social meaning that is assessed indirectly using nonverbal cues (Bateson 1972).

As with all forms of social behaviors, not all nonverbal behaviors are universal. First, meanings attributed to nonverbal behavior are based on the observer's culture. Second, nonverbal behaviors are differentially learned from one culture to the next. In high-context cultures, observers and actors place more emphasis on nonverbal behaviors than in low-context cultures.

Hall (1959, 1966) greatly influenced the advancement of nonverbal behaviors in cross-cultural communication. To date, nonverbal behaviors that have been researched are wide-ranging. We focus on the key features of nonverbal behaviors as they relate to cross-cultural encounters. They include physical appearance and interpersonal attractiveness, kinesics, facial expressions, proxemics, time, and tactile communication.

### Culture, Physical Appearance, and Interpersonal Attractiveness

Physical appearance and attractiveness are highly influential in intercultural communication. Anyone who does not fit the physical norm of the culture will have trouble communicating in that culture. Characteristics such as height, weight, and color of hair, color of skin, hairstyles, clothing, and dressing all vary in norms and acceptability from culture to culture. If one does not look like they belong to the culture, they will not be listened to, will not be able to persuade others, and in turn will fail to communicate successfully with others. Further, what is attractive in one culture may not be attractive in another. What one culture prefers in physical appearance might not be preferred in another.

## Culture and Kinesics

People from different cultures differ substantially in their kinesics in the form of gestures and other body movements. The biggest cultural difference in gestures is the use of emblems (Efron 1968). Emblems are socially learned and culturally embedded gestures and movements that have specific meanings and direct verbal translations (Ekman 1999). The sign language for the deaf such as American Sign Language (ASL) is a good example of an emblematic language based on gestures.

Emblems and gestures most often involve the hand, but recent research has shown a wide variety of gestures emanating from different body parts (Axtell 1998). Beginning from the head and face, people display gestures such as nodding, shaking, and tossing the head; from eyes such as prolonged direct eye contact, averted eyes, blinking, eyebrow flash, rolling the eyes, closed eyes; from ears such as ear grasp, cupping ear, earlobe flick; from nose such as nose tap, wrinkling the nose, nose circling; from cheeks such as cheek screw, cheek stroke, cheek kissing; from lips and mouth such as kissing the hand, fingertip kiss, whistling, spitting, open mouth, teeth flick; from chin such as chin flick, chin toss, chin stroke; from arms such as upraised arms, folded arms, tapping the elbow, arms behind the back, arms brush; from hands such as applause, handshake, hand-holding, hand wringing, high five, hand purse; to fingers such as OK signal, thumbs up, the “V” sign, crossing fingers, snapping fingers; to legs and feet such as showing the sole of the shoe, point with toes, legs crossed at ankles, knees, one ankle resting on the knee of the other leg. Cultures have different gestures and emblems that they use to communicate the same meaning. Also, some emblems are shared by two cultures, but they represent different meanings. Furthermore, there are emblems present in one culture for which another culture may have no equivalent.

Perhaps the most comprehensive and detailed study and systematic observation of gestures across cultures is spearheaded by social anthropologist Desmond Morris. Morris and his associates mapped the geographical distribution of the twenty key human gestures across forty localities in twenty-six countries in western and southern Europe and the Mediterranean regions (Morris, Collett, Marsh, and O’Shaughnessy 1979). In each locale, thirty adult male subjects were approached randomly in public places such as streets, parks, bars, and restaurants and shown standard depiction of the twenty key gestures: the fingertip kiss, the fingers cross, the nose thumb, the hand purse, the cheek screw, the eyelid pull, the forearm jerk, the flat-hand click, the ring, both the vertical and horizontal horn-signs, the fig, the head toss, the chin flick, the cheek stroke, the thumb up, the teeth flick, the ear touch, the nose tap, and the palm-back V-sign. Subjects were asked whether they had seen the gestures locally, and if so, what they meant.

Morris found that many of the gestures extended across national and linguistic boundaries such that few gestures can be truly labeled exclusively as belonging to any single nation. Interestingly, Morris observed a phenomenon he termed "gesture boundary" where certain gestures stopped abruptly or switched in meaning at a certain linguistic or historic region. For example, the ring gesture in France switches from OK in the north, to *zero* in the south.

Head movements also often engender communication misunderstandings. In some parts of the Middle East, Africa, and India, a person nods in disagreement and shakes his or her head in agreement. In some cultures, nodding may simply mean continued attention, not necessarily agreement. A study of bowing in Japan showed that the correct forms of bowing (slight, medium, or deep bow) signify respect for hierarchy in relationships (Morsbach 1988). Moreover, Japanese prefer to remain quiet and in low posture when greeting a senior. Accordingly, Japanese do not stand up immediately to greet a person when they enter a room. Rather, low head posture is a sign of respect and modesty, rather than a sign of rude behavior of greeting (Klopf and Ishii 1984). Clearly gestures and body movements differ in meanings from one culture to the next. Therefore to be successful in communication across cultures, one needs to understand the types, the meaning, and the nuances of emblems and emblem boundaries.

## Culture and Facial Expressions

Panculturally, faces and facial expressions communicate emotions. In general, Ekman, Freesen, and Ellsworth (1972) found that people were able to decode correctly basic facial expressions, and that basic facial emotions are transmitted by the same facial expressions across Western Europe, South America, and even parts of New Guinea. Yet, despite these universal findings across cultures, there remain culture-specific differences with facial expressions. For example, Western cultures are more expressive than Asians. Asians tend to be socialized to hide emotions. Paradoxically, although Asians do not use a lot of facial expressions, they are able to discern subtle nuances that a Western individual may miss (Ekman and Friesen 1969a).

In some Asian cultures, individuals display rigid facial expressions when meeting strangers but relax their facial features when with friends and family members. Also, in some Asian cultures, smiles are taught as a form of etiquette, not as a spontaneous gesture of amusement or friendliness found among Western cultures.

In terms of positive and negative emotional expressions, Kepperbusch and colleagues (1999) and Matsumoto (1996) found that cultures with individualistic orientations approve of public negative emotions such as disgust and sadness with in-group members. On the other hand, cultures with collectivistic orientations tend to portray only positive feelings with in-group members. They are in fact encouraged to express more negative to out-group members. So, in a collectivistic culture, it is more socially acceptable to show negative emotions toward out-group members than in-group members whereas it is the reverse in an individualistic culture.

## Culture and Proxemics

Although proxemics or space preference is affected by factors such as density of population, nature of relationships (formal versus intimate) (Altman and Vinsel 1977; Altman and Chemers 1980), proxemics is also affected by cultural norms. Some cultures establish much closer proximity when interacting, and other cultures establish wider distance.

One of the central propositions in Hall's (1966) analysis of personal distances is that people who are raised in "contact" cultures such as those in the Middle East and Latin America prefer social distances that are more proximate than those in northern Europe and North America.

In a review of more than one hundred studies on interpersonal distances, Altman and Vinsel (1977) found that Middle Eastern and Latin ethnic subgroups preferred smaller personal distances than those maintained by northern European or Americans. For other ethnicities, Jones (1971) found that in general, Asians and Native Americans prefer greater distances when talking with each other than southern European, Arabs, and South Americans. Therefore space communicates various meanings across cultures. Standing too far away from one who expects you to stand close might be perceived as aloofness or coldness. However, standing too close to another might be perceived as pushiness or aggressiveness.

Another nonverbal behavior related to proxemics that is culturally specific is touch or tactile communication. According to Jourard (1968), some cultures are more contact oriented than others. North Americans, Germans, English, and many Asian cultures are generally noncontact-oriented cultures, while southern Europeans, Jewish, Italians, Arabs, and Puerto Ricans represent contact-oriented cultures. Cross-sexual contact is not widely used or accepted by the adult population in most Asian cultures. Tactile forms such as kissing, holding hands, patting, and hugging are reserved for private situations (Jourard 1968).

Anglo-English including Americans, Germans, and English are more offended by the accidental touch of strangers than people in Asian cultures. This is because of the amount of space each culture is granted. Many Asian cultures are densely populated, so they ignore or are not offended by accidental touch. However, Anglo-Saxons are used to more space and will repel accidental touch of strangers. A culturally intelligent individual will understand variations in touch norms of other cultures and discern when tactile communication is necessary, appropriate, or even acceptable.

## Culture and Time

Levine (1997) offers one of the most comprehensive and contemporary cross-cultural observations of time and social behavior. According to Levine, time communicates and affects one's communication with others and one judges others based on their use of time. Levin discovered that the American culture is time-oriented, with a heavy emphasis on scheduling and segmentation. The clock is the controller, and efficiency is valued highly. Americans prefer people to be on time and judge people by how prompt or late they are. In contrast, Latin Americans are less concerned with being on time. In fact, according to some Latin American cultures, starting something late is construed as a sign of respect. In the Chinese culture, it is not unusual for wedding banquets to begin two hours later than the designated schedule so that due respect is given to every single guest who took the trouble to make it to the feast.

Hall (1993) in his analysis of time and culture noted that individualistic cultures view time monochronically, while collectivistic cultures operate under polychronicity. A monochromic view of time regards time linearly and as a scarce resource that must be managed and controlled through judicious use of scheduling and appointments. A polychronic view of time, by contrast, regards time as plentiful and flexible.

In cultures with a monochromic orientation, the concern is with efficiency. In cultures with a polychronic orientation, the concern is more with maintaining harmonious relationships. Time must be flexible so that people can attend to the needs of various people to whom they have obligations (Smith and Bond 1998). In sum, when having contact with people from another culture, one must be mindful that each culture has its unique relationship with time. It may be a very serious breach of etiquette to treat the silent language of time as one would in one's culture.

Beyond these cultural specificities, key nonverbal behaviors can attract intercultural differences in meaning, interpretation, and enactment. It behooves an individual who wishes to be culturally intelligent to be able to discern the subtleties of variations in nonverbal behaviors across cultures and to understand how nonverbal behaviors can affect a person's self-presentation in cross-cultural encounters.

## SELF-PRESENTATION STRATEGIES AND ENACTMENT OF SOCIAL BEHAVIOR

First, we propose that people must possess the cognitive ability to *monitor* how they are being perceived and evaluated by others. To use Goffman's theatrical metaphor, individuals must be dramaturgically aware (Brissett and Edgley 1990). In general, individuals can be distinguished by their levels of impression monitoring (Leary 1996). The first level is impression oblivion. Impression oblivion refers to a person who is unaware at any level of how he or she is being perceived by other people or even of the possibility that others are forming impressions of him or her. The second level is preattentive or unconscious impression scanning. Here, the person monitors others' impressions at an unconscious or preattentive level while devoting his or her conscious attention to other things. The third level is impression awareness. At this level, the person is consciously aware that others may be forming impressions of him or her and may think about the impressions others are forming. The fourth and final level is impression focus. At this level, all of the person's thoughts involve others' impressions of him or her and the possible consequences of the impression he or she is making

We posit that a culturally intelligent individual will function best at the third level of impression awareness. This is the state when self-presentation is deliberate and when people are in a cognitive state called tacit-other/focal-self awareness. In tacit-other/focal-self awareness, individuals are mindful to view themselves from the perspective of others.

Note that we do not regard impression focus as a characteristic of a culturally intelligent person. At this fourth level, impression monitoring is excessive and actually dysfunctional. At the level of impression monitoring, a person is too fixated and overly consumed with others' impressions to effect desirable effects. In fact, when people are too focused on impressions others are forming, they have no additional attentional capacity for other thoughts or deliberations. Their over attentiveness on impression monitoring interferes with and impairs performance. In particular, when individuals are in a state of impression focus, they are so singlemindedly self-presentational that they fail to consider the effects of their behaviors on themselves or others.

As a matter of fact, people who are so consumed by thoughts of the impressions they are making end up making undesired impressions. In some circumstances, a state of impression focus induces excessive social anxiety and causes the individual to do things that are harmful to him- or herself or to other people. In other cases, a state of impression focus induces social inhibition such that individuals withdraw from social engagements to reduce their anxiety and to avoid a full-blown self-presentation failure. Therefore, we posit that a culturally intelligent individual will function most effectively at the third level of impression monitoring and not at the fourth level of impression focus.

We further posit that knowledge about these cultural patterns of social behavior is essential if one wants to work effectively across cultural lines. Therefore, one characteristic of a culturally intelligent individual is the possession of sufficient knowledge about cultural differences, such as knowing the underlying causes of differences in social relations, the basic rules governing social relations, and how these rules can differ across cultures.

We believe that a culturally intelligent individual must also be able to translate successfully their intention to produce a particular behavioral expression into *actual* production of that behavior. One characteristic of social behaviors, especially nonverbal ones, is that many of these behaviors are not readily or effectively produced or controlled (DePaulo 1992). Sometimes people simply do not know which behavior to enact to convey a desired impression. This is especially true when cultural lines are crossed. Because of different cultural norms, one may not know the display rules (Ekman 1972). Display rules refer to the cultural norms governing the expressions of social behaviors. They indicate which behaviors to convey, depending on the situation, the person with whom one is communicating.

There are important differences across cultures in the degree to which expressiveness in general is expected or tolerated and in the more specific norms about who should or should not express which emotions or attitudes in which situations. Cultural norms dictate what overt verbal and nonverbal expressions are encouraged or allowed. Norms for expressiveness proscribe certain kinds of self-presentations.

Even if intentions are there, sometimes intentions cannot be translated into nonverbal behaviors because the behaviors are too difficult to produce at will. Other impediments are more personal. Self-presenters may lack the requisite abilities or experiences, or they may be constrained by the structure of their face or pitch of their voice, or even their own preferred styles of interacting.

Comparing between verbal and nonverbal behaviors, verbal behaviors are more controllable while many nonverbal behaviors are not (DePaulo 1992; DePaulo and Friedman 1998). If a person wishes to articulate a particular word, he or she can simply be mindful and do so. Therefore, it is critical that individuals develop a behavioral repertoire of competence in a foreign language to present themselves in cross-cultural encounters.

With respect to lingua franca (Bond 1991), although it is better to be able to speak in a foreign language, there are also potential dangers of being too good at it. Individuals who are fluent in a foreign language are likely to be evaluated too harshly by native-language speakers. It is useful for a fluent speaker to engage in various strategies to remind the audience that he or she is using a second language. The study of speech pragmatics where one examines the cultural appropriateness of the content of people's utterances (Loveday 1982) may suggest that the less than perfect mode engenders greater sympathy and forces one to empathize and judge the interaction with cross-cultural rather than monocultural standards about one's speech production.

When one compares verbal and nonverbal behaviors, nonverbal behaviors are far more difficult to enact for two reasons: these behaviors occur very quickly, and they tend to be less accessible to actors than to observers. Because actors cannot see themselves (for example, see their own facial expressions, gestures, or body movements as others do), or hear themselves (for example, the tone or pitch of a person's voice sounds different to her or to him than it does to others), they find it extremely difficult to regulate such behaviors. Therefore, nonverbal behaviors vary dramatically along a continuum of controllability, and people experience more behavioral leakage (that is, unintentional enactments) among nonverbal behaviors than among verbal (Ekman and Friesen 1969b).

Nevertheless, many social behaviors can be improved by practice and experience (DePaulo and DePaulo 1989). DePaulo suggests that people are often remarkably successful at managing even nonverbal self-presentation, despite the many potential impediments to their performance. Such skills typically increase with age and experience, with females being more effective than males, possibly because females tend to be more concerned with self-presentation considerations and therefore have learned to enact appropriate behaviors to specific situations more successfully. Further, DePaulo found that high self-monitors and those with high need for approval and public self-consciousness also tend to be more conscious of self-presentation and therefore to regulate social behaviors more effectively to suit the situation and the audience.

## CONCLUSION

Self-presentation and impression management theory offer an appropriate theoretical framework within which to understand how a person can behave effectively cross cultures. The theory posits that a basic motive of individuals in social situations is to present themselves to others in a favorable manner. Once a favorable image is impressed on the observer, or audience, outcomes such as successful completion of tasks, recognition, respect, and other positive consequences from the interaction ensue (Rosenfeld, Giacalone, and Riordan 1995).

One will then draw the inference that individuals who are able to identify, attend to, and control the impressions they make on others via the production of their social behaviors would be able to adapt or acculturate more effectively. Because they are able to create the impression that they are acting in a more culturally consistent manner, they are seen as more acceptable to members of the host culture, thereby facilitating acculturation.

We emphasize the deliberate or purposive behaviors that individuals enact for self-presentation purposes. Although we acknowledge that some individuals may deliberately enact self-presentation behaviors for deceptive or dishonest purposes, we emphasize only culturally intelligent individuals who wish to present aspects of themselves that are moral and genuine; their aim is to manage and regulate their social behaviors in cross-cultural encounters so that there is minimal misperception and misattribution. Therefore, for a culturally intelligence individual, managing the right impressions across cultures is crucial. One can improve the chances of presenting the right impression by increasing one's knowledge about the display rules required of various cultural settings, as well as in actively producing and regulating verbal and nonverbal behaviors in a manner consistent with those cultural norms.

## 7

# CULTURAL INTELLIGENCE ASSESSMENT AND MEASUREMENT

*Chay Hoon Lee and Klaus J. Templer**

## IMPLICATIONS FOR ASSESSING CULTURAL INTELLIGENCE

Even with the availability of proven quality cross-cultural instruments, most organizations use assessments that are based on the candidate's technical or professional knowledge required for the job (for example, Gertsen 1990). Although technical/professional knowledge is a prerequisite in most international assignments, it is not sufficient to ensure success. The degree of success in international assignments also depends on a person's professional effectiveness, interactions with host-country nationals, and the psychological adjustment of his family (for example, Brislin 1981; Kealey and Ruben 1983).

Besides technical knowledge, there is a good amount of consensus on some basic predictors for cross-cultural success. These predictors are empathy, respect, interest in local culture, flexibility, tolerance, initiative, open-mindedness, sociability, and positive self-image (Kealey and Ruben 1983).

> The resulting profile (of a cross-cultural type) is of an individual who is truly open to and interested in other people and their ideas, capable of building relationships of trust among people. He or she is sensitive to the feelings and thoughts of another, expresses respect and positive regard for others, and is nonjudgmental. Finally, he or she tends to be self-confident, is able to take the initiative, is calm in situations of frustration of ambiguity, and is not rigid. The individual is also a technically or professionally competent person. (Kealey and Ruben 1983, 165)

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Individuals with high CQ are often able to make logical deductions and abstractions from the cross-cultural information they have gathered. These individuals have the ability to deal with novel tasks and find new solutions to old problems. They automate responses to routine cultural tasks so that they can effectively deal with and manage new situations in a different cultural environment. In so doing, these high CQ individuals are in a better position to gain a more in-depth understanding of the context in which they are operating. With knowledge and understanding, they can formulate responses that are appropriate for each new cultural context since they have familiarized themselves with the preferences of the people in another culture as well as the constraints under which they operate.

Given the multicultural makeup of most countries and the thrust toward globalization with the resulting growth in international organizations having diverse workforces, there is a growing need to measure the CQ of international managers and staff. For example, careers in international or culturally diverse organizations, especially those using team approaches, require a positive attitude toward cross-cultural differences; any person who does not have some level of CQ to handle such diverse situations is closing the door to many career opportunities. In most cases, efforts on assessment should not only lead to the effective management of cultural diversity in organizations but also help individuals in their own strategic career development.

The interests of the people must be paramount in any assessment (Wiggins 1993), and if the goal is to improve performance, then assessment must go beyond mere audit (Wiggins 1996). Rankin (1992) compares assessment to total quality control in business. He argues that under a Deming approach, assessment must evaluate successes and failures and emphasize the teaching and learning processes. Following Rankin's argument in the use of a Deming approach, assessment is a useful device in stimulating individual change and helping to facilitate individual growth in the long run.

Individuals need to understand how much they know about their CQ so that their learned knowledge can then act as a foundation for further learning. A CQ assessment will help individuals gain a basic overview of their present level of skills and abilities in each of the three components of CQ. In addition, the result of the assessment will also serve as a guide for future professional development in improving one's ability to function in another culture.

## WHO NEEDS TO BE ASSESSED

When we talk about assessment of cultural intelligence, the first thing that comes to mind is assessing employees with regard to their suitability for an overseas posting. A lot of research has been carried out to identify personal variables that are prognostic for success or failure in an overseas assignment, such as personality traits, attitudes, motives, and skills. Additionally, apart from the attributes of the assignee, literature supports that other hindering factors connected with the family of the assignee, the organizational support, and the host country can contribute to failure or success.

A CQ assessment objective is more to identify those who are most at risk of failure, rather than looking for the ideal expatriate. As adjustment problems of family members can have negative effects on the employee's overseas effectiveness, the employee's relocating spouse and elder children should also undergo a cultural intelligence assessment. Having included all family members in the assessment of CQ will additionally reveal the areas of improvement for everyone in the family. These areas of improvements can then be translated in training needs and can be tackled in the preparation phase and early transfer phase of the assignment.

The focus of assessment has been on people who are planning to take up a specific overseas assignment. However, the assessment of cultural intelligence has a wider scope. At least some amount of cultural intelligence will be needed in any intercultural interaction, irrespective of the kind of assignment or job, and it is not restricted to interactions with members of specific countries:

- The assessment goal might be a general assessment of employees who have cross-border business responsibilities or others who have the potential for future overseas assignments.
- Assessment of technicians and managers who are planning for cross-border business responsibilities. They can be the "frequent traveller" technicians who, on a more or less short notice, have to fix things in any part of the world, or these can be managers who have to interact frequently with customers, bosses, colleagues, or subordinates from different countries. In multinational and global companies heads of business divisions hold global responsibilities. Their main office might be in the company's head office or at other location, but they have to travel the globe to attend meetings with customers and employees, and they call employees from different parts of the world for meetings. In short, they have to reach their business targets through employees who are scattered around the globe.

- Assessment of potential members of multicultural teams. With increasing pressure in today's environment on managing international teams, there is a further need to develop understanding on culturally relevant group processes (Earley 1999). Selection of team members with minimum CQ and increasing CQ through training gives the chance for higher effectiveness in group processes. Through synergetic effects, multicultural teams can be more successful than unicultural teams (Adler 1997).
- Another clientele for CQ assessment includes persons such as doctors or community counselors who have to deal with members of other cultures in their own society, for example, in multicultural societies or with immigrants.

## ASSUMPTIONS OF CQ

Kealey (1996) lamented that in spite of the fact that much is known about the criteria associated with cultural success, little knowledge and few skills have been developed to reliably and validly assess people on these criteria. Since then, a few new developments have taken place, but still, further research is needed. With so much emphasis on success in cultural interactions, how does one actually assess "cultural intelligence"? In coming up with a list of CQ assessment methods that can appropriately tap into the domain of CQ, we need to understand the basic assumptions of CQ.

### CQ Is a Multicomponent Construct

Many models of intelligence focus primarily on the psychological or cognitive components of intelligence, and they often use IQ as their only measure of intelligence. However, the conceptualization of CQ is much broader in scope. A person's CQ involves a dynamic interaction of three components. An individual's CQ combines and extends aspects of cognition, motivation, and behavior, as well as the interactions between mental processes, contextual influences, and multiple abilities of the individual. Based on this complex model, CQ is dynamic and can adapt when environmental conditions change.

An adequate measurement of CQ must reflect the three components that are especially relevant in the assessment of the individual. The cognitive component, which is internal to the individual, consists of the cognitive ability that processes information and guides culturally intelligent behavior. The basic features of this cognitive ability relevant to CQ include metacognition, types of knowledge, types of reasoning (analogical and inductive), and social perception related to reasoning.

CQ from a motivational perspective emphasizes a person's values, efficacy expectation, and goals. The motivational component leads the assessor to examine the valence or value of different rewards available to the individual, the perceived instrumentality of various behaviors for attaining those rewards, and efficacy of the individual in achieving the goals.

The behavior component of CQ is the external aspect of cultural intelligence, and according to CQ theory, this aspect of CQ involves the practical application of the cognition and motivation components to real-world contexts. The behavioral component taps the perception of one's behavior toward others, that is, the way other people express themselves in a new cultural situation. They display curiosity in the world at large and are able to think before speaking and doing.

### CQ Is Multileveled

Culturally, intelligence in a broad perspective must relate to what may be called multilevel-order processes. There are different levels of abstraction at which CQ can be examined. Earley has posited that metacognition knowledge as well as cognition knowledge function in an individual's CQ. Specifically, the metalevel seems clearly distinct from the lower component process level, such as in the procedural and declarative levels. Metacomponents are higher order mental processes that culturally intelligent individuals use effectively to guide their problem-solving efforts.

At the lower level of the mental process we have the declarative knowledge, which consists of abstract concepts and specific memories. This declarative knowledge, in turn, can be broken down further into another level of mental process that consists of context-free semantic memory about the world in general and episodic memory for the events and experiences. Similarly, when compared to the metacognition knowledge, procedural knowledge is a lower level of the mental process. It consists of rules, skills, and strategies so that the individual can manipulate, transform, and translate declarative knowledge into action. In addition, procedural knowledge can be subclassified in terms of cognitive and motor skills. These concepts, personal memories, interpretive rules, and action plans are the cognitive structures of the next level of procedural knowledge. Together, the procedural and declarative knowledge constitutes the expertise that guides an individual's approach to solving the problems in a new cultural encounter.

Behavior that is attributable to each of the levels can be identified and isolated. A culturally intelligent individual uses different levels of behavior to handle a problem in an intercultural interaction. At the lowest level, the individual has to encode the elements of a problem and then evaluate the knowledge that is necessary for solving the problem. At the next level the individual has to source for the behavioral strategies and then compare the available options with one's mentally generated solution. Following this, the individual will then have to justify his or her responses. At the final level, the individual will physically execute the verbal or motor responses in the most suitable manner.

## Intelligence Is Hierarchical

First a culturally intelligent person will be able to identify a cultural problem that needs to be solved. Once the problem is defined, he or she will outline the given goals and obstacles of the problem. He or she will then have a mental representation or a "mental map" of the cultural issues and the relationships among the given issues. Part of the individual's process in solving the problem in a new cultural encounter is to monitor how well one is accomplishing one's goals and evaluate the results once the problem is solved.

Psychometric theorists have adopted hierarchical theories toward intelligence assessment (Cattell 1971; Vernon 1971). Similarly, the organization of CQ abilities is best represented in a hierarchical structure, according to the differing levels of generality of CQ. For example, at the top of the metacognition hierarchy is a comprehensive and integrated factor measuring abstract reasoning and tests of knowledge. Following this are other factors such as declarative and procedural cognition.

At each level of the CQ hierarchy, different abilities can be distinguished. Higher-order abilities are usually used for planning, selection of strategies, decision making in problem solving, and elaborating and reconstructing the problem in a new form; lower-order CQ is used for looking at the degree of consistencies in proposed solutions and reasoning and solving problems by analogy to other similar situations. Usually at the lower-order CQ, problem-solving abilities in intercultural interactions are usually more specific rather than the general problem-solving abilities expected at the higher-order CQ.

During cross-cultural interactions, the lowest-order CQ abilities are incorporated into the next higher-order abilities of more crystallized reasoning, and language, visual perception, auditory perception, memory, speed, and idea are then incorporated into the top-level metacognition knowledge. In sum, higher- and lower-order CQ are needed to understand individual differences in CQ and how an individual will relate to different cultural contexts.

## CQ Is Personal

In most cases, each individual brings to a situation a somewhat different mix of CQ abilities, which are often influenced by one's values, learning history, interest, and goals. First, the centrality of an individual's values shapes how one engages in particular actions over others. These values are the standards that lead individuals to take position over certain cross-cultural issues, predispose them to favor particular ideologies, and guide their behaviors in the new environment. In addition, these values will shape the evaluation and judgment that they will make concerning other cultures. Second, each individual's learning history is unique. The way an individual interacts with others and transforms knowledge in a new culture depends very much on their personal learning history. Although there are some who may share a common culture in which homogeneous learning situations are imposed, via socialization, schooling, and apprenticeship, not all imposed situations will be uniform for every individual.

Third, high CQ individuals usually have high personal interest in other cultures. Frequently, individuals with strong interests in cross-cultural interactions will not only persevere when faced with problems in new situations but also set goals and expectations so that they will proactively search for better strategies to increase their effectiveness in cross-cultural interaction. These high CQ individuals usually have better control over their actions and hence are much able to enhance their experience in new cultural situations. Moreover, through their determination to achieve certain goals, individuals are able to solidify personal commitment to adjust and develop good relationships with people from another culture.

## High CQ Enhances One's Ability to Adapt

Adaptation is a process in which an individual attempts to find a good fit between the environment and him- or herself by adjusting and changing something about him- or herself. This process has two elements: first, the individual needs to have a perceptive observation of his environment and context; second, the individual needs to respond to this observation to affect any desirable changes. Very often, high CQ individuals tend to be more perceptive in reading the underlying motives of others from a different culture. Skills at reading these physical cues are consequently an important part of an individual's adaptive proficiency in a new culture. High CQ individuals are sensitive to facial expressions, hand gestures, and other nonverbal cues that have important implications in intercultural communication.

A culturally intelligent individual should find it easy to deploy different, or even contradictory behavioral styles to new situations. These individuals are highly adaptive like chameleons, capable of dramatically changing their behaviors when the situation demands it. Moreover, they are highly motivated to engage the environment to learn more about the new cultural surrounding, be willing to persevere in the face of adversity, and have the desire to adjust to a new cultural context.

In short, high CQ individuals have the social insights to interpret meaningful connections among other cultural behavioral acts and are able to respond flexibly to sequences and changes of social behavior in an intercultural situation.

### CQ Facilitates the Shaping Function

Sternberg (1985) suggests that most of the successful people in a given field are those who can shape the field in their own image. Shaping refers to altering certain aspects of one's environment to bring them more in line with one's talents and abilities. CQ functions as a control of assembled behavioral performance in intercultural interactions. When an individual is in a foreign land, he or she is often more dependent on the locals than the locals are on him or her. One's ability to shape the locals and the environment is limited. Nevertheless, there is significant opportunity especially if the individual can identify the local community's consensual values and shape what the locals emphasize. Many high CQ individuals who can shape the values and priorities of the people they encounter in a foreign territory are more likely to accomplish their goals more easily and be more successful in a foreign country than those who do not have these abilities.

### High Levels of CQ Can Be Learned

An individual's CQ may be relatively stable in the short run but can be learned and developed in the long run. As much of the learning occurs on the job and through experience, personal motivation is likely to be a major determinant of the development of an individual's CQ. An important learning aspect of CQ involves capitalizing on one's experiences to solve problems in a new culture and to quickly automatize procedures. Many high CQ individuals are skillful and insightful when processing new information. The efficient processing of new information allows high CQ individuals the mental resources to learn and automatize the information in the new culture in the fastest possible manner. They are able to spontaneously select, encode, combine, and compare information from a previous experienced cultural situation to solve a problem in a new cultural encounter.

In the short run, individuals adapt to new cultural situations by selecting the situation according to their own strengths. However, in the long run, they will have to learn to adapt to situations that they cannot avoid. Thus, high CQ individuals who are frequently exposed to international encounters learn to adapt quickly and successfully to the different requirements of each culture. Through continuous learning and adaptation in new situations, these individuals build behavioral performance that is not only uniquely and personally meaningful but also suits the demands and requirements of various cultural contexts.

## REVIEW OF CROSS-CULTURAL ASSESSMENT INSTRUMENTS

Snyder (1974) developed a self-report measure of individual differences in self-monitoring of expressive behavior and self-presentation. Self-monitoring was defined as self-observation and self-control guided by situational cues to social appropriateness. Kealey (1989) found this Self-Monitoring Scale (SM) to be predictive for overseas success.

Dodd (1998) lists a few short self-report assessments applied to intercultural communication, including Cardot's Self-Confidence Scale with a reliability of .80 (Cronbach's alpha). This ten-item scale attempts to assess whether the individual holds a positive attitude toward oneself, for example, if one feels that one has a number of good qualities and is satisfied with oneself, or whether one feels that one is a failure and feels useless at times.

The Personal Communication World View Scale (Dodd and Garmon 1998) intends to measure the level of communication control a person has. The reported alpha reliability of this scale is .86. Nevertheless, a closer look at the twenty items reveals that the instrument does not restrict itself to the communication process, but goes beyond communication and might give a more general measure of external locus of control. For example, one item asked whether good as well as bad things that happen are beyond the person's control, or whether other people have more effect than the person him- or herself does in attaining goals.

Another instrument that is designed to tap on the cultural competency of a person is the E-Model Scale. This twenty-two-item scale measures the intercultural effectiveness of an individual. More specifically, it has been designed to allow an initial screening for relationship potential and adaptability potential of a person in a new cultural environment (Walter et al. 1998).

Redden (1975) developed the Culture Shock Inventory. This self-report measure attempts to predict difficulties in dealing with culture shock. This instrument assesses people on the following characteristics: lack of Western ethnocentrism; degree of direct experience with people from other countries (including foreign-language skills); cognitive flex that is an individuals' openness to new ideas and beliefs; behavioral flex that defines the degree to which one's own behavior is open to change; the degree of awareness and understanding of beliefs and behavior patterns in specific other cultures (specific cultural knowledge); general cultural knowledge of behavior patterns observed in individuals; and interpersonal sensitivity (awareness and understanding of verbal and nonverbal behavior).

Moran and Riesenberger (1994) postulate twelve cultural competencies of a global manager. These twelve competencies fall into four broad categories. They are global attitudes, leadership and fostering change, interaction and acting skillfully, and understanding of national and organization cultural and avoiding cultural errors. The twelve competencies are (1) global mind-set, (2) works as an equal with people from diverse backgrounds, (3) has a long-term orientation, (4) facilitates organizational change, (5) creates learning systems, (6) motivates employees to excellence, (7) negotiates and approaches conflicts in a collaborative mode, (8) manages skillfully the foreign-deployment cycle, (9) leads and participates effectively in multicultural teams, (10) understands own culture, values and assumptions, (11) accurately profiles the organizational culture and national culture of others, and (12) avoids cultural mistakes and behaves in a manner that demonstrates knowledge of and respect for other countries.

For corporate-training seminars, Moran and Riesenberger have designed a self-rating as well as a peer-rating questionnaire called Individual Global Competency Assessment (not published in Moran and Riesenberger 1994). Each of the twelve competencies is measured through six items. As with many other instruments designed to assess awareness for training purposes, the dimensions have not been derived based on empirical, factor-analytical research. Reliability or validity information is not available, and the quality of some of the items is questionable. For example, respondents are asked whether they can identify ethnocentric perspectives they hold. A person who is not clear about the definition of ethnocentricity might not be able to answer this item. If one disagrees with the statement, this might indicate that one might not be aware about one's own ethnocentric beliefs, or one might want to indicate that one does not hold any ethnocentric beliefs, which could be either true or not true. By contrast, if one agrees, then one might either really be able to identify most of the ethnocentric perspectives, or one might only notice a few of them without any awareness of most of his or her own ethnocentric beliefs.

The Intercultural Communication Inventory (ICI) is another cultural competency assessment measure. The purpose of this twenty-five-item Intercultural Communication Inventory is to increase knowledge and awareness among employees in areas such as workforce diversity, culture shock, language and accent, body language and gestures, communication distortions, cultural misunderstandings, customs and traditions, and ethnocentrism (Talico Inc. 1992). The publisher recommends this instrument for use as a training course aid, either as an ice-breaker or as a closure exercise.

Bennett (1986, 1993) suggested the Developmental Model of Intercultural Sensitivity (DMIS) as a framework to explain the reactions of people to cultural difference. He assumes that a person's competence in intercultural relations increases as the experience of cultural difference becomes more complex and sophisticated. Going through the development stages, the cognitive structures change as well as attitudes and behavior related to cultural difference. There are six stages in this framework. Bennett (1986, 1993) defined the first three stages as ethnocentric stages. The three ethnocentric stages are denial, defense, and minimization of intercultural differences. The second three stages of this instrument are defined as intercultural sensitivity (Bennett 1986, 1993). The intercultural sensitivity stage is comprised of acceptance of cultural difference, adaptation, and integration. During these six "ethnorelative" stages the individual experiences his or her own culture in the context of other cultures. Based on the DMIS framework, the sixty-item Intercultural Development Inventory (IDI) was developed (Hammer 1998; Hammer and Bennett 1998) and recently revised (Hammer, Bennett, and Wiseman n.d.). Reported reliability coefficients (alpha) for the factor-analytically derived scales are .80 and above.

The fifty-item self-scoring Cross-Cultural Adaptability Inventory (CCAI) is another training instrument designed to provide feedback about participants' potential cross-cultural effectiveness (Kelley and Meyers 1992). It has four subscales: (1) the Emotional Resilience Scale, which measures the degree to which an individual can rebound from and react positively to new experiences; (2) the Flexibility/Openness Scale, which targets the different ways of thinking and behaving typically encountered in cross-cultural experiences; (3) the Perceptual Acuity Scale, which assesses the extent to which a person pays attention to and accurately perceives various aspects of the environment; and (4) the Personal Autonomy Scale, which measures the extent to which an individual has evolved a personal system of values and beliefs and at the same time respects others and their value systems. The norms are based on more than six hundred subjects from diverse cultural and occupational backgrounds. The CCAI is also available as a multirater kit to provide 360-degree feedback. Kelley and Meyers (1999) state that the instrument has face, content, and construct validity. The overall reliability of the instrument is given as .89. However, in a sample of Singapore Armed Forces soldiers, alpha-reliabilities for the four scales were .81, .79, .73, and only .52 for the seven-item Personal Autonomy Scale. Interscale correlations for this sample ranged from .68 to .78 (Soh 2001). This means the scales can nearly be regarded as parallel tests, as the intercorrelations come close to acceptable parallel test reliabilities. In another study with thirty-seven missionaries overseas, the instrument showed high retest reliability, but predictive validity in terms of adequacy of cross-cultural adaptation—as measured through self- and peer-ratings after an overseas stay of six months—could not be established (Jensma 1996). However, it might be argued that conducting the repeat and adjustment measures after six months might be precipitate as this falls in a period where at least some persons might experience more or less symptoms of culture shock. Nevertheless, those experiencing a high degree of culture shock can be the ones who are later the most effective (Kealey and Ruben 1983).

The Overseas Assignment Inventory (OAI) is used for selection, development, and training (Tucker 1999). The OAI tries to make managers and candidates understand how motivations, expectations, and attitudes can affect the quality of intercultural adjustment by assessing the following dimensions: (1) expectations about living in a new country; (2) open-mindedness/receptivity to ideas, values, and ways of other cultures; (3) respect for other beliefs, trust in people, tolerance/willingness, and ability to adapt to the new culture; (4) unfamiliar or uncomfortable surroundings and circumstances; (5) locus of control, flexibility/willingness to consider new ideas and approaches in dealing with problems and tasks; (6) patience; (7) social adaptability; (8) initiative; (9) risk taking; (10) sense of humor; (11) interpersonal interest; and (12) level and quality of communication between spouses. The instrument is available in English, French, and German. The database includes several thousand employees from more than forty different nationalities.

Spreitzer and colleagues (1997) developed a measurement tool named Prospector for early identification of international executive potential. End-state competencies as well as the ability to learn from experience are assessed through fourteen factor-analytically derived scales, namely, end-state competencies: (1) sensitivity to cultural differences; (2) business knowledge; (3) courage; (4) brings out the best in people; (5) integrity; (6) insightful; (7) committed; and (8) takes risks. It also measures several learning-oriented dimensions: (9) seeks feedback; (10) uses feedback; (11) culturally adventurous; (12) seeks learning opportunities; (13) open to criticism; and (14) flexibility. The scale reliabilities (alpha) of this instrument range from .70 to .92. Beyond intercultural important competencies, the instrument seems to measure general management and leadership competencies. However, even if it is of advantage to possess these competencies, it might be advisable not to make use of all of them in non-Western cultural contexts. For example, not all societies value if one talks openly about one's own mistakes and weaknesses (an item from the "seeks feedback" scale).

The instruments described so far were questionnaires. The measures that follow use different approaches. The Test for Category Width (Detweiler 1975, 1978, 1980) aims to differentiate narrow categorizers who give meaning to behavior narrowly using their own cultural values, from broad categorizers who acknowledge that a behavior or situation can have different meanings in different contexts. The assessment through presentation of a visual task follows the tradition of "objective" personality testing, as it does not rely on the measurement of self-report questionnaires (T-data instead of Q-data; Cattell 1963). The test consists of four sets of nonsense figures. For each set a cue figure is defined by a nonsense category name. The person has to indicate how many of the subsequent figures in the set, varying in size, features, spatial orientation, and so forth, are equivalent enough to the cue figure to be placed in the same category. The more figures a person places in the same categories, the higher is the category width score.

The Global Awareness Profile (GAP test) is a 120-item self-scoring inventory that is designed to measure awareness and knowledge of global geography and issues (Corbitt 1998). It assesses knowledge in different geographic regions, in the areas of environment, politics, geography, religion, socioeconomic, and culture, along with twelve questions about broad global issues.

Cushner and Brislin (1996) used the culture assimilator method to develop a culture-general assimilator. This culture-general assimilator is comprised of a set of critical incidents that focuses on the communalities of cross-cultural experience. It depicts various examples of encounters between members of two different cultures (Brislin 1986; Cushner 1989; Cushner and Brislin 1996).

Ruben (1976) designed the Intercultural Behavioral Assessment Indices (IBAI) to measure seven elements of intercultural communication competencies, namely, display of respect, interaction posture, orientation to knowledge, empathy, role behaviors, interaction management, and tolerance of ambiguity. Trained observers have to systematically collect and analyze behavioral observations. Based on the IBAI, Koester and Olebe (1988) designed the Behavioral Assessment Scale for Intercultural Communication (BASIC) in a way that allows the original Ruben scales to be assessed by nontrained observers.

Assessment centers in the corporate sector are usually designed in-house or through consultants to fulfill the need of the company to select people or develop their employees. An exquisite example of the development and design of an intercultural assessment center is by Stahl (2001). After in-depth interviews with more than two hundred German expatriate managers and collection and analysis of critical incidents, Stahl (2001) identified seven intercultural competencies needed for success in international work assignments: tolerance for ambiguity, behavioral flexibility, goal orientation, sociability and interest in other people, empathy, nonjudgmentalness, and metacommunication skills. Based on these criteria, the Intercultural Assessment Center (IAC) has been designed as a tool for identification and development of international management talent. In the one-day version of the Intercultural Assessment Center training, the participants will go through two group exercises, namely, a group discussion termed "international assignment" and an international negotiating simulation. Additionally, individual exercises are comprised of a presentation dealing with the motivation to go abroad, an impression management exercise, cross-cultural role-plays, the analysis of film sequences, an isomorphic attribution exercise, and an intercultural competence questionnaire. The IAC is the only measurement tool in this review that assesses all three facets of cultural intelligence with a multimethod approach, including behavioral observations and a questionnaire.

**Table 7.1**
Components of CQ Assessed Through Different Assessment Instruments

| *Author* | *Instrument* | *Metacognition* | *Cognition* | *Motivation* | *Behavior* |
|---|---|---|---|---|---|
| Snyder (1974) | Self-Monitoring Scale (SM) | ✓ | | | |
| Cardot (1998) | Self-Confidence | | | ✓ | |
| Dodd & Garmon (1998) | Personal Communication World View | | | ✓ | |
| Walter et al. (1998) | E-Model scale for Intercultural Effectiveness | | | ✓ | ✓ |
| Redden (1975) | Culture Shock Inventory | ✓ | ✓ | | |
| Moran and Riesenberger (1994) | Individual Global Competency Assessment | ✓ | ✓ | | ✓ |
| Talico Inc., (1992) | Intercultural Communication Inventory (ICI) | | ✓ | | |
| Hammer & Bennett (1998) | Intercultural Development Inventory (IDI) | ✓ | ✓ | ✓ | ✓ |
| Kelley & Meyers (1992) (CCAI) | Cross-Cultural Adaptability Inventory | ✓ | | ✓ | ✓ |
| Tucker (1999) | Overseas Assignment Inventory (OAI) | ✓ | ✓ | ✓ | ✓ |
| Spreitzer et al. (1997) | Prospector | ✓ | ✓ | ✓ | ✓ |
| Detweiler (1975) | Category Width | | ✓ | | |
| Corbitt (1998) | Global Awareness Profile (GAPtest) | | ✓ | | |
| Cushner and Brislin (1996) | Culture-general assimilator | ✓ | ✓ | | |
| Ruben (1976) | Intercultural Behavioral Assessment Indices (IBAI) | | | | ✓ |
| Koester and Olebe (1988) | Behavioral Assessment Scale for Intercultural Communication Effectiveness (BASIC) | | | | ✓ |
| Stahl (2001) | Intercultural Assessment Center (IAC) | ✓ | ✓ | ✓ | ✓ |

Table 7.1 gives an overview on the instruments described above and indicates the facets of cultural intelligence that are being tapped by these instruments.

## ASSESSMENT METHODS FOR CQ

From the above assumptions and review of the cross-cultural competency assessment instruments, it should be clear that the assessment of CQ has quite a different character than most of the existing cross-cultural competency assessments. Most of the existing cross-cultural instruments would not singly address all the above characteristics of CQ. The CQ approach is not only focused on assessing the individual's repertoire of CQ behaviors, but also should seek to understand the general cognitive structures and motivational processes out of which individualized CQ is constructed, how they develop, and how they play a role in ongoing social interaction in different cultures.

A number of different methodologies are available to measure most characteristics of CQ. An assessor, therefore, is often faced with deciding which of several methodologies should be used. To make an informed decision about which method to use, an assessor needs to have a good idea of the relative strengths and weaknesses of the wide variety of methods that can be used to assess CQ. Knowledge is required, for instance, on the relative assets and liabilities of data-gathering methods such as questionnaires, interviews, observations, and other methods.

In some cases the decision on the method used is an easy one because one methodology is clearly superior, but in many situations this is not true. All approaches to data collection about CQ have significant weaknesses; hence, the choice process usually involves comparing the strengths and weaknesses of different approaches and then deciding which one or ones are the best to use. This section intends to provide this knowledge through a general discussion of some of the most commonly used measurement methods by briefly reviewing the attributes of each method.

### Survey

Surveys are well suited to assess intangibles: one's attitude, beliefs, expectations, values, and others (Kerlinger 1986). Surveys measure what people say about themselves either through open- or close-ended questions. In recent years, close-ended questions have become increasingly popular, whereas open-ended questions have been asked less frequently (T. Smith 1987). The lack of popularity of open-ended questions among researchers is due to two reasons. First, open-ended questions might not work well for respondents who are not articulate, because they might have difficulties explaining their feelings. Second, some researchers feared that the respondents would be likely to answer open-ended questions by mentioning the most salient possible responses, and not those that are truly most appropriate to the questions.

Surveys have a number of distinct advantages. First, survey allows simultaneous data collection from multiple people. Second, the answer to most surveys can be easily quantified. Third, with skillful question writing, a single survey can be used to obtain a large amount of data from an individual covering a whole range of topics and issues. However, there are also some drawbacks to surveys. A survey is a less direct way of assessing a construct. A survey is also nonempathetic as it is a relatively impersonal data-collection process. Since a survey is prestructured, it is not adaptive; if the questions are not appropriate for a specific individual, they cannot be changed during the administration. In short, although a survey has its own merits, including being relatively easy to administer and tapping internal experiences, it is difficult to obtain and assess ongoing conscious process related to thinking.

Developing a survey is a creative process. One has to know what needs to be measured as well as how the measurement can be achieved. Deciding on what are the right things to measure can sometimes be a complex task. This is true especially with CQ, which is multicomponent and multileveled. In any event, the ability to assess the whole domain of CQ requires a comprehensive survey that has breadth and depth.

### Interview

The most direct way of assessing how an individual functions in another culture is to interview the person who is involved in the intercultural interaction. The interview has been defined as "a conversation with a purpose." It may be unstructured, semistructured, or structured, depending on the degree of advance preparation to preset the order and wording of each question. The different forms of interview have different roles and can be meaningfully used to complement one another.

An unstructured interview is where the assessor provides very little guidance to the respondent either in terms of questions or possible answers; it is like a stream-of-consciousness conversation. Unstructured interviews permit the interviewer to become creative and flexible. The interviewer does not have with him a set of predetermined questions; he is generally guided by a topic or a set of topics around which the conversation between the interviewer and the respondent takes place. He or she usually begins with a very general question and then continues by clarifying or summarizing what the respondent says. This form of interview makes it possible for better understanding of the dynamic of certain phenomena that have taken place in the new culture and gives the assessor a feel for how the individual is coping in the new country.

The extremely structured interview is limited by the predetermined set of questions; they are less adaptive than the unstructured interview. The amount of structure in the interview may vary from an open-ended projective question to a set of questions with items that have been carefully scaled (Edwards 1957). However the respondent is unconstrained when answering them. The structured interview can be used for large samples and for purpose of comparative studies (Pareek and Rao 1980). It is very useful in large-scale investigation, which involves many interviewers. Structured interviews will reduce the interviewers' biases, which may influence the results.

Conducting an interview with the respondents face to face has several advantages. Pareek and Rao (1980) suggest that interviewers are able to establish a relationship with the respondents, and this allows them to answer questions more easily. Moreover, the interviewers are able to observe new phenomena or gain new insights by talking to these people in the field. Interviews may be preferable in cross-cultural research especially when the literacy level of the people does not allow them to answer a questionnaire properly, or when the motivation to complete such a questionnaire may be low. Interviews allow the interviewers to learn directly about the individuals' needs, concerns, ideas, interests, opinions, or even fears and hopes surrounding a new cultural situation. Interviews are excellent sources of qualitative measurement. It is a measurement tool that supplements and deepens the understanding of quantitative measures and often provides information that numbers cannot. It is a good tool to elucidate the mental processes underlying many of these individual differences.

Although there are many advantages and benefits in gathering information through conducting interviews, interviews do have some potential problems as data-collection devices. First, interviews can consume large amounts of the assessor's and the respondent's time. Second, the interviewer can affect the outcome of the interviews through the choices of the questions asked. In addition the biases of the assessor may also affect what may be recorded and omitted. Finally, the nature of the interaction between the assessor and the respondent may encourage or discourage certain kinds of responses.

### Observation

Observation is such a straightforward qualitative measurement tool that it is often overlooked and underutilized. Observation is a real-time data collection device, rather than a retrospective collection device. Observation allows the assessor to gather information of the individual's CQ by observing the actual behavior as it occurs during an intercultural interaction. Through observation, the assessor can gain insights into good and problematic behaviors. Observation offers qualitative data as well as quantitative data. A keen observer will notice and be able to describe the mood of the intercultural interaction. The assessor will see the "spirit" displayed by the individual, the frown on the foreigner's face, or the lack of focus of the individual when interacting with someone in a new cultural situation.

During observation, the assessor focuses on what is happening rather than interpreting (cognition or motivation) why it is happening. It enables direct collection of data about the behavior itself rather than reports of behavior. As observation involves watching behavior during a period of time, it allows the assessor to discover patterns of behavior. These patterns might never be revealed in a questionnaire or interview because of their discrete nonepisodic nature. Observation is typically "unobtrusive" because it studies subjects' behavior without their knowledge, thereby reducing the "reactive" biases inherent in experiments and surveys (Longabaugh 1980). In addition, the assessor can see a comprehensive picture of the roles, movement of the people and the physical settings. Observation offers the flexibility of measurement, for example, with someone who comes from a different culture and who is not familiar with filling up a survey.

Although observation offers a unique opportunity to examine behavior in a new cultural context, it has certain drawbacks. First, observation can be easily biased in the choice of what to observe, the process of observing, and the interpretation of results. Second, the presence of an observer will inevitably affect the behaviors of the person. Third, the costs that are apparent in observational studies include the time, the monetary costs, and psychological costs. When observational studies are carried out across cultures these costs are multiplied (Longabaugh 1980). Hence, given the large cost factor, it is crucial that the assessor is sure that he has chosen the most effective methodology before he embarks on an observation study of behavior in its natural settings.

Finally, the worth of the observation depends heavily on the skill of the assessor. For example, an assessor with very limited cultural sensitivity may spend hours but not see anything or bring back nonusable data. It is important that the assessor has the skill to select, control, and record the behaviors to be observed. Such technique requires training to ensure representativeness of the observed behavior or ecological validity, reliability or recording/coding, and validity of the observations (Longabaugh 1980).

## Computer Simulation

Another method for understanding how well an individual can solve a problem overseas is to attempt to simulate his or her behavior with a computer program.

Simulations are assuming increasing importance in social sciences both as heuristic (learning) and as data-gathering devices (Bailey 1994). The current simulation program has levels of intelligence that relate to levels of understanding; from simply making sense of a situation through levels that justify their actions in terms of goals, alternative hypotheses, and knowledge used, to a level of "complete empathy" in which the system explanation would include an account of its feelings and emotions (Lohman 2000).

There are four advantages for using simulation to assess CQ. First, operation of a simulation can provide dry runs that will help avoid costly mistakes in the real operation. Second, simulation can heighten the visibility of the phenomenon to be studied by making the phenomenon more accessible to the assessor. Third, the assessor often has more control over the simulation of a system than over the actual situation itself. For example, in the course of one week, the research might be able to simulate one's year's negotiations. Last, in social research, a simulation has potential use in cross-cultural situations that are theoretically important, but might cause harm, embarrassment, or some other moral and ethical problems if the participants are studied in a natural environment.

One of the pitfalls of simulations is the fact that it is artificial. By definition a simulation is merely an imitation or copy of the real thing. There is always the possibility that the simulation is incomplete, and that conclusions gained from it are not applicable to the phenomena being modeled. Particularly in intercultural modeling in which the social and cultural systems may be highly complex, the researcher may have little assurance that all the essential components are included in the model. Second, although the possible economic advantages of simulations have been pointed out, it should not be inferred that all simulations are necessarily inexpensive. Some computer simulations may require a large budget for time, machines, software, and training costs.

### Critical Incident

Countless events occur in our lives every day that if observed, recorded, and summarized would reveal patterns and trends in an individual's CQ. Critical incidents are a gold mine of information lying in one's memories. For example, most people can recall stories about others encountered when one traveled to a new cultural environment. However, unless these stories or critical incidents are recorded, they become war stories without the benefits of learning or action. Although summarizing the information from critical incidents is definitely a very complex process when compared to adding numbers or calculating the percentages involved in a quantitative measurement, nonetheless it is well worth the time.

Critical incidents are the qualitative side of measurement tools. A good way to assess one's CQ is to pay attention to critical incidents as indicators. Critical incidents are drawn from data an individual collects on an ongoing basis. With proper focus and organization of the data, critical incidents can be used as important CQ behavior indicators. In addition, these indicators can then be added to the questions of survey or face-to-face interviews.

### Assessment Center

The assessment center continues to be popular in U.S. organizations and elsewhere (Borman, Hanson, and Hedge 1997). For example, Payne and colleagues (1992) report a threefold increase from 1985 to 1990 in the use of assessment centers for managerial selection in the United Kingdom. The assessment center technique is a multimodal assessment approach where multiple skills are observed and rated by multiple observers through use of multiple assessment instruments. The goal of an assessment center can be selection of new staff, or for existing employees, assessment of potential for higher or different kind of jobs or assessment of strengths and weaknesses for training and development purposes.

At the core of assessment centers are situational exercises, for example, leaderless group discussions, role-plays, simulations, or presentations so that the candidates' actual behavior becomes observable while they perform certain set tasks. Other instruments, such as psychological tests and inventories, computer simulations, and other individual written or PC-based exercises, are also used to complement the situational exercises. Usually, an interview is added as one of the measures. Recently, some organizations have added "intercultural competence" to the existing list of dimensions to be assessed in their assessment centers.

### Cultural Assimilator

The history of the cultural assimilator goes back to 1962 at the University of Illinois, where researchers proposed the development of a computer program that could be used to provide cross-cultural training to Navy personnel (Albert 1983). Cultural assimilator is a cross-cultural training strategy that aims to make people understand important differences between the home culture and a second culture (Fiedler, Mitchell, and Triandis 1971). If an individual knows which culture he or she will be visiting, culture-specific assimilators can be very effective at helping the individual gain intercultural experiences of the targeted culture (Cushner and Brislin 1996). In addition, the culture-general assimilator also provides a way of encouraging the development of a global, multicultural perspective for those who work with people from many cultures.

In recent years, cultural assimilator has employed a critical-incident approach to present examples of culture clashes between individuals from different backgrounds (Cushner and Brislin 1996). A typical cultural assimilator exercise would have participants read a number of cultural clashes critical incidents. For each critical incident, the participants are asked to attribute and interpret the behavior of the actors in the conflict situations. The participants are then presented with a number of alternative explanations and are asked to select one that best accounts for the conflict in the critical incidents.

## GENERAL MEASUREMENT ISSUES

In addition to sampling the different assessment methods, the following is a summary of some important attributes of measurement that a CQ assessor needs to understand when considering the most appropriate choice of methods.

### *Utility and Ease of the Assessment Method*

Although there are some assessment methods that require knowledge of computer programming, higher level of mathematics, and/or advanced psychometric techniques, in most instances it is preferable that the assessment method be designed in such a manner that it is easy to administer, score, and store. In most cases, a simple assessment method costs less to carry out, produces data that is easily understood, and can be used by a wide range of individuals.

### *Reliability*

Reliability refers to the consistency and stability of measurement and the extent to which the measurement is free of random error. Adequate reliability must be present in a method before it is of any use in CQ assessment. The reliability of a method may be affected by the testing conditions (for example, noise, interviewer, and instructions), frustration of having to do a test, or the assignment of inappropriate test to an individual.

### *Validity*

Validity means the extent to which an instrument measures what it intends or purports to measure. The traditional types of validation procedures are criterion validation, construct validation, content validation, and face validation. In recent years, the literature reveals various new forms of validity, which are social validity, interpretative validity, and ecological validity. Social validity refers to the impact of the assessment technology on the candidates and the candidates' perceptions of the assessment process (Schuler 1993). Interpretive validity involves a concern with what "object, events, and behaviors mean to the people engaged in and with them" (Wells, Hirschberg, Lipton, and Oakes 1995, 82). Interpretive validity includes (1) understanding the basic communicational and epistemological presuppositions of one's subjects, and (2) making sure that all data collection procedures conform to these presuppositions. Much work remains to be done to establish methods for ensuring interpretive validity (Greenfield 1997). Ecological validity is another well-known type of validity in cultural psychology. It concerns whether a method elicits data that is representative of behaviors outside the research context (Greenfield 1997). According to Greenfield (1997), ecological validity is enhanced when the researcher studies naturally occurring behavior rather than laboratory behavior.

### *Freedom from Method Bias*

Methods of measuring CQ must be free from bias where there is no systematic tendency for them to be influenced by or to reflect anything other than the domain of CQ that they are supposed to assess. Bias is a generic term for all nuisance factors threatening the validity of cross-cultural research (van de Vijver and Leung 1997). Bias could arise from particular characteristics of the instrument or from its administration. Some examples of method biases are differences in physical condition during administration, differential social desirability, tester effects, communication problems between respondent and assessor in either cultural group, and differential response styles such as extremity scoring (van de Vijver and Leung 1997). One of the ways an assessor can reduce the method bias is by repeating administration of the same instrument to various cultural groups. A significant improvement in one group at the second occasion, or a gain pattern that is differential across groups, undermines the validity of the first test administration. Nkaya, Huteau, and Bonnet (1994) have shown that with repeated test administrations students progressed rapidly. Another way to assess method bias is the systematic variation of stimuli across culture. Such variation is useful for cross-cultural studies because each type of stimulus content or response mode may have its own limitations (Triandis 1992).

### *Usefulness of the Collected Data*

Certain methods produce data that is rich in information about feelings, actual events, and causal sequences behavior, while other methods produce largely numerical data. Although collecting valid data and using adequate methods can ensure accurate description of CQ functioning, having an accurate description does not ensure a successful assessment. The description must also be usable by the assessor if CQ is to be better understood, improved, or maintained as a result of the assessment efforts.

### *Issues of Psychometric Measurements*

Psychometric instruments have evolved a long way in the literature on intelligence assessment. Sometimes what are touted as advances seem cosmetic or almost beside the point. For a long time, our understanding of the nature of intelligence was based primarily on psychometric tests to illuminate the structure of intelligence. Investigators of intelligence would administer various kinds of paper-and-pencil, self-reported psychometric tests to examine and then interpret what they believed to be the psychological bases from the psychometric test results. Although once a prestigious method of research, by about 1970 this approach to measure intelligence was looked on with quite a bit of skepticism (Undheim 1994). The problem with the psychometric instruments in intelligence assessment is that it had little to say about mental processes underlying intelligence (Undheim 1994). As a result, one does not know how to deal with processes in order to influence mental structure and vice versa. This points to the reason why Earley and Singh (1995) recommend a hybrid form that incorporates traditional methods and new process measurement approaches, which allow for a more detailed understanding of the cognitive processes behind performance and behind the individual differences that such performances show.

## SUMMARY

The assessment of knowledge and skills in general is difficult, however the identification of domain-specific components of CQ is even more difficult. In that spirit, we have reviewed some measurement issues and methods, each of which has been shown to have its own particular set of strengths and weaknesses. The clear implication of this review is that no one method can be considered as the best or the only one to measure all three components of CQ.

It is apparent from the growing number of nonpsychometric methods that we believe some of them can be applied appropriately to assess the different components of CQ. For example, rather than developing instruments to assess the motivational and behavioral facets of CQ, it will be interesting to study the application of motivational and behavioral CQ to real-life problem-solving tasks. Real-life tasks include things such as making friends with someone from another country, visiting another country for holiday or business, setting up a business in another country, and working well in multinational teams. Studying these life tasks and the strategies employed in pursuing goals related to these tasks provides insight about the motivational and behavior aspects that are indicative of cultural intelligence. In another example, the culture assimilator can be very effectively used to tap the cognitive aspect of CQ. The cultural assimilator enables one to assess how culturally intelligent people use their cognitive abilities and knowledge to evaluate and interpret cultural conflict in the critical incidents.

The use of different methods produces different kinds of data that are relevant to the understanding of the different components of CQ. Without multiple methods, it is difficult to assess all the elements encompassed in CQ. The most effective data-collection strategy is one that uses multiple measures and multiple methods of data collection (Templer 1995). By combining data from interviews, questionnaires, observations, and other sources, the assessor is able to test the validity of the different assessment methods and thus is in a better position to discard any data that may be distorted or biased. When multiple assessment methods are used in an adaptive and mutually confirmatory way, the misinterpretation of information can be minimized and avoided through this cross-checking process.

The mind of a human being is such a complex entity that it is impossible for us to imagine any effective assessment that does not involve the use of multiple data sources and multiple methods. Any assessor who limits him- or herself to only one assessment method is making a serious error and indeed may not actually be conducting an overall CQ assessment, but a rather limited measurement of a single attribute of CQ. All of us have different levels of cognitive motives, values, efficacies, goals, and behaviors, and it is necessary to utilize different measures of CQ to reflect these different aspects of CQ. Our view is that a CQ assessment must involve looking at different data sources. This means that the training program for assessors needs to be broad and comprehensive. A rather ambitious training program is necessary if the assessor is going to be able to capture and effectively utilize the broad array of assessment measures.

As there is no one method that is effective in providing data on all aspects of an individual's CQ, multiple assessment methods are a must if assessors are to develop a complete picture of CQ. Future investigators who wish to make the attempt to assess CQ may well be advised to incorporate various methods, both quantitative and qualitative, to assess CQ, as in most cases a few short strategic methods will work far better than relying on only one method. The choice of data-collection methods is an important one, and a whole set of advantages and disadvantages for each method must be weighed against the others. Methods that adequately sample the domain in question, in addition to being reliable and valid, will definitely be of great contribution to the CQ literature.

# 8

# CULTURAL INTELLIGENCE AND GLOBAL WORK ASSIGNMENT

## TRENDS TOWARD MORE GLOBALIZATION AND THE NATURE OF GWA

With an unprecedented search for new markets for most goods and services and an increased pressure on costs, businesses are propelled toward internationalizing their operations beyond national boundaries to survive and compete successfully. In a borderless world economy, resources of all types (financial capital, raw materials, services such as insurance, communication systems, information) can flow and move freely across national boundaries. Yet a fundamental resource necessary to formulate and implement global strategies and to coordinate resource flows in global operations is the human talent of any corporation. In fact, there is a consensus that globally competitive organizations sustain their competitive edge based on the uniqueness of their human resources and their systems of managing an adequate supply of global managers and workers who are capable of coordinating global strategic efforts of the firm, while at the same integrating individual local host-country strategies (Barlett and Ghoshal 1989; Pfeffer 1994). Specifically, the single critical success factor in globalizing businesses lies with the cadre of highly competent global leaders and skilled global workers who possess the global knowledge of production capabilities and consumer demands for products and services worldwide (Harvey, Buckley, and Novicevic 2000).

To compete in a global economy, organizations have found it essential to send their workers abroad on international or global work assignments (GWAs). Workers are assigned to global work assignments for a number of reasons. First, and most dominantly, workers are assigned local jobs to fill in positions where local expertise or skills are scarce. Second, organizations move human resources globally to facilitate the transfer of knowledge—in the form of technical expertise, technology, standard operating procedures, organizational routines typically from the parent company to a local unit—and to coordinate and control business activities across geographical boundaries. Third, workers are moved globally as part of a concerted management or career development plan to groom global leaders by facilitating learning either by individuals from the parent company (also known as parent country nationals, or PCNs) of the local resource and market conditions, or by individuals from local host units (inpatriates, host-country nationals [HCNs]), or third country nationals (TCNs) to the parent company to understand parent company policies and strategic directions, and to develop and sustain a worldwide cultural orientation of the firm.

Since the early 1980s, the number of GWA has increased exponentially (Black 1988) with the United States alone having more than 3,400 multinational companies, 25,000 companies with overseas branches or affiliates, and approximately 40,000 companies doing business abroad in the 1990s (Ones and Viswesvaran 1997a). With the increasing prevalence of overseas operations, there is pressure on multinationals to select the best employees to manage these foreign operations and, therefore, an increasing demand for managerial talent with the requisite international experiences.

### Poor Success Rates of GWA

Although demand and need for global work assignments are increasing, failure rates of global work assignments remain unfortunately high. In the United States, for example, the rates of early return of American expatriates varies in different companies from 10 to 80 percent. The common failure rate is 20 to 30 percent. The failure rates for European and Japanese multinationals tend to hover over 10 percent. The lower rates have been attributed by prior research to better selection, preparation, language skills, and longer foreign assignments (Tung 1982, 1987).

The cost of failure to the organization is very significant. The estimated average cost per failure ranges between $50,000 to $200,000 or more, depending on the expenses involved with moving the expatriate and his or her family to a foreign location (Copeland and Griggs 1985). In fact, the cost of an expatriate in the first year of relocation can be as high as $350,000, and these figures do not include costs of the overseas operations or the loss of such key personnel, nor the resulting career costs for the firm or the individual who experiences an early return from such an assignment (Briscoe 1995).

In addition to financial and personal costs, opportunity costs also arise from the domestic absence of poorly adjusted employees (Tung 1981b). Because expatriates are generally selected based on their high level of competence domestically, transferring these individuals to a foreign location means a significant loss to the domestic operations, hence the opportunity costs of GWA.

Given the huge financial, personal, and opportunity costs involved in failed global work assignments, it behooves researchers and managers of global corporations alike to understand the reasons for these failures and to craft strategies that can effect more effective global work assignments. The primary purpose of this chapter is to explore and apply the concept cultural intelligence (CQ) in the context of global work assignments. Specifically, we wish to understand how a person with a certain level of cultural intelligence will be able to operate effectively in a global work context.

We present a model that focuses on the link between an individual's level of CQ and his or her success in global work assignments. We refer to the individual on GWA either as an expatriate or sojourner. In any case, we are referring to employees of business or government agencies who are sent by their organizations to other countries on a work assignment to accomplish a job for a temporary period of time. We argue that a person with high CQ will be able to perform more successfully in global work assignments than one with low CQ. However, the model also recognizes that success in global work assignments does not necessarily depend on a person's CQ alone. Because of the complexities of GWA success, we contend that success of global work assignment is a function of a host of multilevel contingencies and moderators. In other words, success is based not only on a person's CQ but also a host of other individual, job, organizational, and national contingencies.

## A Multilevel Model of CQ and Success in Global Work Assignment

We present the model of CQ and its relationship to GWA success in Figure 8.1. As depicted in this figure, it can be seen that although an individual's level of CQ will directly affect his or her level of success in GWA, because of the multifaceted nature of GWA success coupled with the job, organizational, cultural, and nonwork-related complexities that are present in any GWA, we show how the link between CQ and GWA success is not as simple as one wishes it to be. Rather the relationship is embedded within a very complex set of contextual variables such that a person with a high level of CQ may indeed not be successful in GWA, or conversely, a person with a low level of CQ can succeed in GWA.

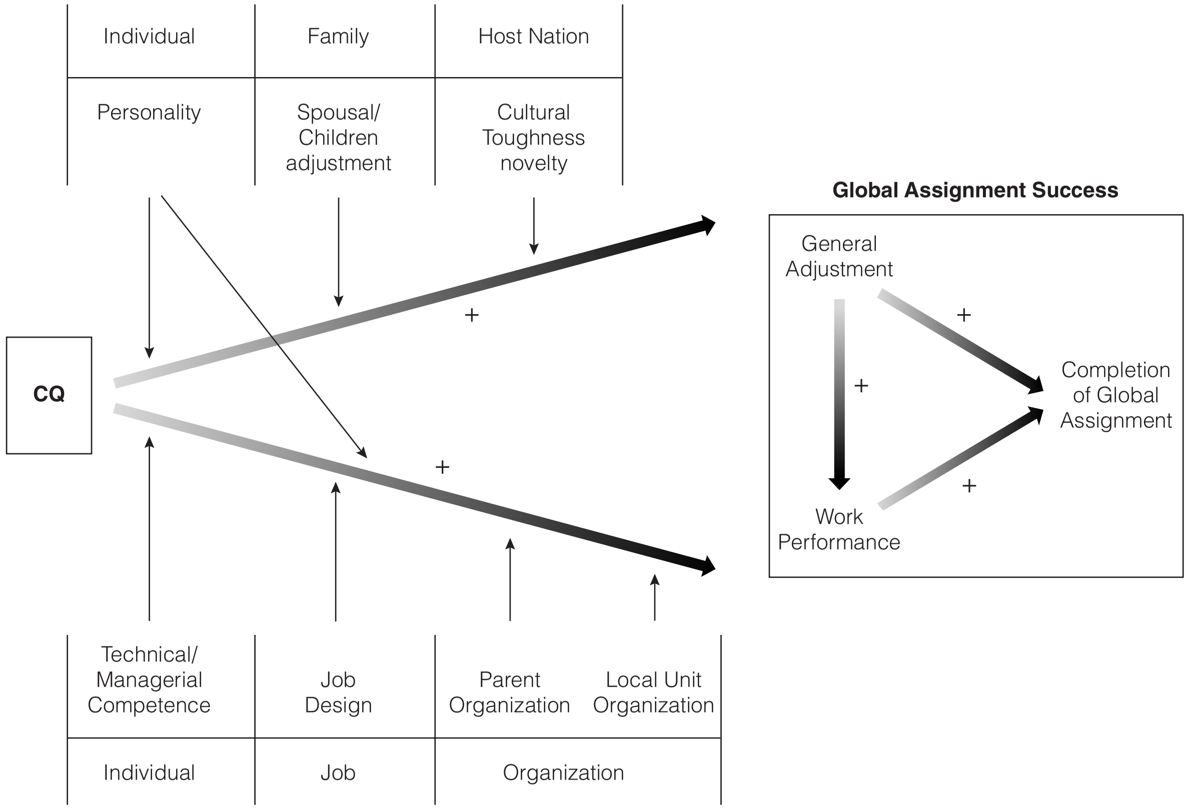

**Figure 8.1.** A Multilevel Model of CQ and Success in Global Work Assignment

Specifically, we show how an individual's personality characteristics and basic managerial competencies relate to an organization's approaches to foreign work assignments. Various individual-, job-, organizational-, and national-level constructs are identified as possible moderators affecting the relationship between a person's CQ and GWA success.

## Multifaceted Measures of Success in Global Work Assignments

Despite the upsurge in interests in expatriate management, there is still a general lack of consensus among researchers about the criteria for evaluating success in GWA (Aycan 1997). The list of success criteria range from job performance, satisfaction, adaptation, adjustment, completion of assignment, premature returns, culture shock, role shock, overseas effectiveness, professional effectiveness, interpersonal effectiveness, acculturation, and others (Ones and Viswesvaran 1997b).

The most common criterion seems to be the concept of adjustment, and the interest on adjustment as a legitimate criterion of success can be traced back to the larger body of sojourner research, of which sending expatriates, that is, business personnel who go overseas for accomplishing a job-related goal (Ones and Viswesvaran 1997b) is but a subset of the larger sojourner population. In fact, when one reviews the history of sojourner research, the study of sending business personnel on GWA can be traced back as early as the 1960s (Henry 1965; Megginson 1967), as part of a larger domain of research on success of sojourners. In the 1960s, the primary focus on the sojourning literature was on three groups of people: students, voluntary workers (such as Peace Corps. personnel), and army personnel. These groups of individuals are collectively identified as "sojourners" and are differentiated from other groups of individuals such as refugees or migrants because sojourners' stay in another country is temporary, voluntary, typically more than six months, and task related (such as studying, teaching, giving advice, representing a nation or a company, engaging in a business, completing an assigned job, providing spiritual guidance, and so on) (Aycan and Kanungo 1997).

In the mid-1980s, the impetus toward globalization of businesses necessitated systematic studies on expatriate management. In the early 1990s, researchers have conducted much work in understanding the dynamics and complexities surrounding international and global human resource management, including the area of global work assignments.

Research in sojourning strives to understand the problems sojourners experience in adjusting to their stay in another country and to prescribe ways they can overcome these difficulties. The work on sojourners is influenced heavily by a clinical psychological orientation. When the Peace Corps. was established in 1961, clinical psychologists were used extensively in the selection process through using panel interviews and personality testing (Ones and Viswesvaran 1997a). When sojourners experienced problems, these problems were framed from a clinical orientation as "adjustment" difficulties resulting from stress and mental health. Removed from familiar personal and social structures, sojourners are diagnosed to experience tremendous stress in the form of "culture shocks" (Oberg 1960; Ward, Bochner, and Furnham 2001), involving symptoms such as anxiety, helplessness, irritability (Adler 1995), "culture fatigue" (Guthrie 1966), involving similar symptoms of irritability, impatience, depression, loss of appetite, poor sleep, and "role shocks" (Byrnes 1966), involving experiences of role ambiguity and loss of personal status (Higbee 1969).

Therefore, in the sojourning literature, "success" of sojourning focuses on the ability of sojourners to "adjust" to the new country. Problems in adjustments are numerous and varied and include issues such as loneliness, homesickness, depression, arrival confusion, lack of personal guidance and counseling, somatic complaints, family problems or loss of loved ones, religious problems, adjusting to food and climate, adjusting to social customs and norms, contrasting or conflicting values and assumptions, defining role in the new society, difficulty in making social contacts, dating, sexual problems, and so on (Church 1982). With the focus on adjustment, the sojourning research also theorized and described the temporal stages of adjustments where certain periods of the adjustment process are deemed more difficult and stressful than others. Common stage theories or hypotheses of acculturation include a U-curve hypothesis (Lysgaard 1955) where sojourners theorized to adjust relatively better in the first (0–6 months) and third segment (12–18 months) of a sojourning episode and less well in the second (7–12 months). In contrast, other acculturation processes have theorized a W-shaped curve (Gullahorn and Gullahorn 1963). In the W-curve model, the stages follow the traditional U-shape curve only that the second spike of stress in the W-curve focuses on the reentry culture shock when a sojourner returns to his or her home country.

As a direct heritage from the sojourner research, the expatriation research on overseas business assignments, has also regarded "adjustment" as a key component of GWA success. Defined as the process of change an individual undergoes to "fit into" the host society, adjustment is thought of as a form of individual satisfaction derived from the perceived acceptance from hosts, and ability to function during everyday activities without severe stress (Brislin 1981). Given its broad meaning, adjustment has been conceptualized and operationalized as multidimensional (Aycan 1997). To date, adjustment as it relates to GWA is seen to comprise three forms (Black, Gregersen, and Mendenhall 1992b; Black, Gregersen, Mendenhall, and Stroh 1999):

1. work adjustment—that is, fitting into the local unit culture, policies, procedures, operations, and requirements of the tasks;
2. social cultural adjustments—that is, engaging in harmonious interpersonal relations with members of the host society; and
3. adjustment to the general environment—that is, adjustment to daily living issues such as food, transportation, entertainment, health care, safety, and satisfaction with life in comparison to others in reference groups both in the host society and country of origin.

From the practical and organizational perspective, when multinational corporations send their employees abroad, they may not consider "adjustment" as the primary concern or indicator of global work assignment success. Rather, being more outcome oriented, concerns that organizations face when sending employees on overseas assignments are more focused on the ultimate criterion of overseas effectiveness, that is, an individual's overall performance on the job assigned overseas (Hammer 1987; Arthur and Bennett 1997). In other words, companies may only regard work performance as the sole criterion of success based on whether an individual will perform well on the overseas job.

Just as with the concept of adjustment, work performance in GWA is relatively broad. While most empirical studies focus on technical performance alone, Caligiuri (1997) suggests that work performance in GWA should embrace more recent broader and more sophisticated conceptualizations of work performance as having both technical and contextual components (Borman 1992; Borman and Motowidlo 1993). In perhaps the most comprehensive treatment of work performance in a GWA context to date, Caligiuri (1997) suggests that work performance in GWA comprises:

1. technical performance that requires technical knowledge, skills, and abilities and will include starting production or service operations, keeping abreast with latest and changing technologies, customer knowledge, current environment/industry trends, and others;
2. contextual managerial performance that includes managerial responsibilities of maintaining good working relationships among employees, training and developing subordinates, and representing the organization to customers and the public;
3. contextual prosocial performance that embraces expatriates' prosocial dimensions of organizational commitment to their parent organization and local unit organization, the need to be self-directed, and willingness to expend effort without much supervision; and

4. contextual expatriate specific performance that includes replacement planning and transferring information between parent and local unit employees, language and culture proficiency, and establishing good relationships with host nationals—customers, suppliers, colleagues, host-country government officials, local community, and others.

Finally, another practical consideration that multinational corporations face when sending their employees abroad is whether the expatriate will complete the full term of the assignment. Therefore, completion of foreign assignment is regarded as the most basic behavioral criterion for assessing the outcome of a GWA (Black, Gregersen, and Mendenhall 1992a). Accordingly, most expatriate studies have thus used early or premature returns from the country of assignment as a measure of success. Success, according to this criterion, occurs when an individual remains in the host country for the duration of his or her assignment. Premature termination where an individual returns back to the home country before the completion of the assignment is indicative of having failed the GWA. In studies of American expatriates, the premature return rates range between 16 to 40 percent of all assignments (Torbiorn 1985).

### Relationship Among the Success Measures of GWA

The three common success measures in GWA are: (1) an individual's adjustment to the host nation; (2) his or her work performance; and (3) the completion of the GWA. When one examines carefully these criteria, one is able to discern that they may not be mutually exclusive or independent of each other. In fact, there are important interrelationships among them. First, the completion of GWA, akin to the traditional concepts of tenure or turnover, could be theorized to be a behavioral consequence of adjustment and work performance. Unless a person is able to adjust well to the new environment and perform effectively, we expect the individual to leave the assignment either voluntarily or involuntarily. Therefore, we expect adjustments and work performance to be predictors of GWA completion. In addition, just as positive social support prevents a decline in psychological health of an individual, adaptive adjustment certainly may be expected to bolster expatriate job performance. Accordingly, we expect and theorize that an individual's level of social-cultural and general environment adjustment will positively affect his or her performance at the work place. Figure 8.1 depicts the interrelationships among the three success measures of GWA.

### Relationship Between CQ and Each Measure of Success in GWA

From Figure 8.1, we propose that an individual's level of CQ significantly affects directly two of the three success criteria for GWA: adjustment and work performance. Specifically, we argue that a person with higher levels of CQ will be able to adapt and adjust to the new host nation more successfully than a person with lower levels of CQ, because high CQ individuals possess the requisite metacognitive, cognitive mental maps, cultural motivation, as well as the behavioral repertoire of responses to a GWA. Given that completion of global assignment is an outcome of an individual's adjustment experiences and work performance, we do not expect an individual's level of CQ to affect completion of GWA directly. CQ has a link to global assignment completion only so far as it is mediated through adjustment and work performance.

An individual on GWA will have to adjust to three aspects of the new environment: the work environment at the local unit including new policies, procedures, local unit culture, and so on; social-cultural interactions with host-country nationals; and general daily living realities, including food, transportation, health care, and safety. Social networks are disrupted and need to be reassembled during a cross-cultural move. Individuals with higher CQ, especially those who possess a high level of self-efficacy effecting cross-cultural moves, will be more confident and able to establish new social networks and proactively create bridges, links, and seek out referent groups (for example, similar ethnic groups in the host nationalities) to minimize culture fatigue or culture shock to coping with the new living environment.

At the workplace, a sojourner must interact with local peers, supervisors, and subordinates and adjust to new work norms, routines, ethics, and standards operating procedures that are often tacit in nature. Work performance in GWA is multidimensional. To be successful at work, an employee on GWA will need to perform not only technical but also in more contextual activities that are managerial, prosocial, and expatriate specific in nature. We would expect a person with higher levels of CQ to possess the cognitive maps, culturally embedded work schemas, and the motivation to detect the tacit nuances of the appropriate contextual activities required of him and to behave with appropriate self-presentation at the local unit environment.

Perhaps the most acute difference sojourners experience at the workplace is the sudden change in the hierarchical distribution of power, privilege, and prestige due to changes in professional status (Alarcon 1999). On the one hand, expatriates often experience sudden upward surges in professional status typically from a middle-management position in the parent organization to the position of a CEO, a managing director, a functional head, or part of the top management team of the local unit. On the other hand, other kinds of sojourners, particularly skilled sojourners often in professional and technical jobs may experience a downgrade of their professional status, when host nations are reluctant or unwilling to acknowledge higher educational certifications/degrees conferred in foreign nations (Ang, Van Dyne, and Begley 1999). A person with high CQ will more likely be able to discern the sudden shifts in professional status and adjust his or her behaviors to overcome the paradoxes of status inconsistencies, particularly as it relates to overqualification and underemployment and possible variations in value hierarchies that differ across cultures (Van Dyne and Ang 2000).

## Multilevel Moderating Influences on General Nonwork Adjustment

A number of key factors can either strengthen or weaken the relationship between CQ and adjustment and work performance. Specifically, although on average an individual with higher CQ will typically be able to adjust well and therefore perform well in GWA than an individual with lower CQ, there may be attenuating circumstances that can change that relationship. The reverse is also true, in that a lower CQ individual may not necessarily be more maladaptive in his or her adjustment or work performance, because there may be mitigating circumstances in the GWA that can moderate the direct influence of CQ to adjustment or performance.

A series of multilevel factors can effect the link between CQ and adjustment, especially adjustment to the social-cultural and general environment that is not necessarily restricted to the work domain. These factors, as depicted in the top half of Figure 8.1, include individual factors such as personality and spousal/family issues, as well as characteristics of the host nations such as cultural toughness or the cultural distance between the host nation and the country of origin of the sojourner.

### *Personality*

The first factor that can moderate the relationship between CQ and adjustment in GWA is the expatriates' personality characteristics. Since the mid-1980s when there is an upsurge of interests in dispositional predictions of job performance among industrial and organizational psychologists and human resource management researchers on selection, personality-based characteristics have been theorized and shown to predict successful job performance (Barrick and Mount 1991; Tett, Jackson, and Rothstein 1991). Similarly, in the expatriate success literature, the issue of whether personality is important for expatriate success in adjustment and work performance in a foreign land has generated considerable interest.

In the early days of research in sojourners' selection, the quest was for the discovery of "an overseas type" (Byrnes 1966). Taking a person-based or personality perspective, researchers were keen to profile the personality characteristics of an overseas type that could predict GWA success, including adjustment, job performance, and early returns.

The types of personality characteristics theorized and espoused to be critical to expatriate success were extremely wide-ranging. Ones and Viswesvaran (1997b) offer an excellent review of the range of personality traits as it relates to expatriate success. Both positive and negative personality traits have been explored. They include tolerance for ambiguity (Hammer, Gudykunst, and Wiseman 1978), open-mindedness, curiosity, self-confidence (Kets de Vries and Mead 1991), authoritarianism or dogmatism (M. Smith 1966), self-esteem, self-acceptance (Grande 1966), ego strength (Mischel 1965), California Personality Inventory Scales (Dicken 1969), empathy, respect (Ruben and Kealey 1979), self-orientation (Mendenhall and Oddou 1985), and ethnocentrism (Hall and Gudykunst 1989). Some of these studies found that personality predicts expatriate success, while others did not.

A more systematic approach has been undertaken by Ones and Viswesvaran (1997b) and more recently demonstrated by Caligiuri (2000). Using the Big Five personality profile, Ones and Viswesvaran (1997b) theorized main effects of the Big Five on GWA success, such that (1) extroversion is likely to predict acceptance of overseas assignments, good interpersonal relations, effort, and prosocial performance of expatriates; (2) emotional stability or the negative pole of neuroticism is likely to predict acceptance of overseas assignment, adjustment to new culture, and completion of expatriate assignments; (3) openness to new experience is expected to predict acceptance of new overseas assignments, adjustment to the new culture, and completion of assignment; (4) agreeableness is expected to be predictive for good interpersonal relations and compliance or acceptance of authority in expatriate job performance; and (5) conscientiousness is expected to predict good job performance.

Caligiuri's (2000) empirical study showed that extroversion and agreeableness predicted the completion of expatriate assignments, while conscientiousness predicted supervisor-rated performance. All other personality characteristics did not have a significant impact on GWA success.

The finding that there are no insignificant main effects of personality on GWA success is not surprising. Given that any overseas assignment presents so many new situational factors that engender high uncertainty, it would appear that proposing a purely personality based perspective presents an underspecified model of GWA success.

As presented in Figure 8.1, we propose that CQ is central in predicting the two GWA success measures of adjustment and work performance because a person with higher CQ has greater *specific* cognitive, motivational, and behavioral predispositions to manage the *cultural* uncertainties and novelty of a GWA. In our model, we recognize the importance of personality dispositions in their influence on expatriate success. However, we theorize that general personality characteristics, such as the Big Five traits of emotional stability, openness, extroversion, agreeableness, and conscientiousness serve as moderators and not primary influences on GWA success. In effect, we are proposing that a high CQ individual will be able to adjust and perform even more effectively in global work assignments, especially if he or she meets the general dispositional profile of high levels of the Big Five. However, for a person with low CQ, having high levels of general dispositional characteristics of emotional stability, openness, conscientiousness, agreeableness, and extroversion may not in themselves engender effective GWA or GWA success.

### *Spousal/Family*

The second factor that can moderate the relationship between CQ and adjustment in GWA is the sojourner's spouse and family adjustment. Prior research found that spouses/family's inability to adjust to living in the host country to be one of the most frequently cited reasons for the failure among American expatriates (Black and Stephens 1989; Harvey 1985; Tung 1981b). The phenomenon is not confined to American expatriates. In a Japanese study of expatriates, Fukuda and Chu (1994) found that adjustment difficulties by spouses and other family members were rated the number one reason why expatriates terminated their global work assignments. Therefore, we expect that even if an individual has a high level of CQ and is personally able to adjust well to the social-cultural and general environment of the host nation, unless his or her spouse and family members are also able to adjust effectively, the family or spouse maladjustment can affect the individual's personal adjustment and, in turn, his or her work performance. Therefore, the positive relationship between CQ and success in global assignment is contingent on spousal/family adjustments to the host nation.

Unlike a domestic work assignment, global work assignment is particularly vulnerable to spillovers of family to work life (Caligiuri, Hyland, and Bross 1998). Spillover Theory suggests that an individual's experiences with home life have carrying over psychological effects on his or her work life, and vice versa (Crouter 1984). One can imagine greater spillover in global work assignment simply because such an assignment frequently involves the entire family. Consequently, new family stresses arise since in almost all circumstances; all family members are displaced as a result of global work assignments.

First, spouses disrupt their careers to follow their spouses to the new host nations. And, especially in dual-career families where work is the "central life interest" (Dubin 1992) or core of their identity (Lawler and Hall 1970) in the spouses' lives, such disruptions do induce adverse effects on their self-worth and self-identity (Harvey 1998). Second, even if trailing spouses are not in the workforce in the host nation, their social networks are disassembled during a cross-cultural movement. Without emotional support from extended families, or network of intimate friends and community, adjustments may be especially difficult for spouses in foreign nations in coping with an alien culture and unfamiliar living environments. Third, the children also face discontinuities in their lives. Education may be interrupted, and children lose their friends and classmates. Stripped of culturally familiar peers, they may feel culturally and socially isolated.

Often, the sojourner or expatriate is fortunate to plug into a preexisting social and professional network through the global work assignment. As a result, in everyday living, he or she may have the comfort of the familiarity of his or her company's culture, especially when the work environment in the global assignment is similar to the one in the domestic position.

In contrast, spouse and family members experience completely new surroundings in their daily lives. Unless family members make special efforts to reach out to the local community to create new networks, the sojourner or expatriate may find him- or herself facing greater demands from family members at home in the foreign nation. For example, a child's maladjustment to his or her new school, or a spouse's dissatisfaction with the living conditions such as lack of proper child care, difficulty with securing spousal employment, difficulty in getting specific kinds of food or daily necessities, transportation, or language difficulty, and social isolation often affects every family member, thereby aversely affecting the sojourner's own adjustment to the host nation and, consequently, his or her work performance in the local unit organization.

For these reasons, we qualify our initial statement of the positive relationship between an individual's level of CQ and GWA success. Even if an individual has high CQ, his or her family members may not have the same level of CQ (cognitively, motivationally, or behaviorally) to cope and adjust to the new environment. Therefore, based on Spillover Theory and prior evidence of the criticality of family adjustment, we expect family adjustment to moderate the relationship between CQ and GWA success in social cultural and general nonwork adjustment. Specifically, we expect a high CQ individual to be able to adjust and perform effectively in global work assignments, only if his or her family is able to adjust effectively in the host nation.

### Host-Nation Culture—Degree of Cultural Distance, Novelty, or Cultural Toughness

We now focus on another critical nonwork factor, that is, the host nation culture that can influence the strength of the CQ-GWA success, particularly in the social cultural and general nonwork adjustment criteria.

The degree of similarity or differences in cultural norms, values, and beliefs between the host nation and the sojourner's home nation is typically conceptualized in terms of cultural distance (Berry 1992; Searle and Ward 1990), degree of cultural toughness (Mendenhall and Oddou 1985; Black et al. 1999), culture novelty (Black, Gregersen, and Mendenhall 1992a), or level of culture shock (Oberg 1960; Ward, Bochner, and Furnham 2001). All refer to the negative impact of differing cultural values between host- and home-country nations on a person's psychological well-being. Although we would expect a person with high CQ who possesses the cognitive schema, motivation, and behavioral repertoire to adapt to differing levels of cultural toughness, we also expect a person with relatively low CQ to adjust worse as the cultural toughness index rises. Specifically, we expect a low CQ individual to be very much affected by larger cultural distance since perceived cultural distance has been shown to be related to mental health indicators (Babiker, Cox, and Miller 1980) and to be a significant predictor of social-cultural adjustments (Ward and Kennedy 1993).

Torbiorn (1982) described how Americans found the following continents in descending order of toughness in terms of hardships in adjusting to daily living. They are (1) Africa, (2) Middle East, (3) Far East, (4) South America, (5) Eastern Europe/Russia, (6) Western Europe/Scandinavia, and (7) Australia and New Zealand. Tough living conditions include high cost of living, harsh climates, poor health care, different food, lack of personal freedom/safety, fewer conveniences, and pollution. Some times, political conditions are so unstable that expatriates are forced to be evacuated, such as the experiences of more than 100,000 expatriates located in Middle Eastern nations of Iran and Libya in the 1980s (Gomez-Mejia and Balkin 1987).

Of course there will be variations in the degree of toughness even within these continents. For example, although located in the Far East, which is generally regarded as a culturally tough region, Singapore is often touted as "Asia 101." With citizens comprising four races, Singapore's dominant language is English. All signs, notice boards, and instructions are displayed in English. Public transportation is efficient, with ample cabs and a well-oiled mass user-friendly rapid transit system.

Singapore has low crime rates and its streets are clean. The island has preserved much of the tropical character, with huge boulevards flanked with rain trees and well-manicured nature parks. Cuisines from all corners of the world are available on the island—Chinese, Malay, India, German, Greek, Italian, Japanese, American, and others. Singapore has a number of international schools catering to expatriates from America, Germany, Japan, Australia, and elsewhere. In Singapore, sojourners and their family members can find culturally similar enclaves in different parts of the island: for example, sojourners of Malay descent can find Malay food, medicine, clothing in the Malay Village; in Little India shops sell exotic Indian spices, music, gold jewelry; Chinatown offer similar ethnic amenities. Other nationalities have equivalent cultural enclaves. For example, the Americans, British, Japanese, and Germans have social clubs they can belong to for a nominal fee. Regular social functions allow foreigners from the same home country to seek out culturally familiar peers or ethnic contacts on foreign soil.

Cultural distance is also a factor for how MNCs adjust to local conditions (Kogut and Singh 1988). At the organizational level, for example, MNCs find it easier to transfer their technologies, human resource practices, operating procedures, and achieve internal consistency through standardization when the cultural values between host and home country are more similar than different. For example, Japanese MNCs were found to be better able to transfer their HRM practices to the rural areas of the United States where the values of the rural Americans were perceived to be more similar to those of the Japanese (Taylor, Beechler, and Napier 1996). Therefore, we would expect that an expatriate even with relatively low CQ can adapt and adjust to living in these places because the cultural distance or novelty is not as great as in some other places. In effect, small cultural distance or low cultural toughness moderates the relationship between CQ and GWA success such that a relatively low CQ individual will adjust more easily to the new environment if the environment is not as unfamiliar, harsh, or difficult to navigate than if an environment is hostile to the sojourner.

### Multilevel Moderating Influences on GWA performance

Just as we have examined a series of multilevel factors that can affect the relationship between CQ and adjustment, we now discuss a number of key multilevel moderators that can either strengthen or weaken the relationship between CQ and work performance. These moderators, as depicted in the bottom half of Figure 8.1, include (1) individual factors such as personality and technical competencies;(2) job factors, such as the nature of role transition faced by the sojourner during the course of moving from parent to local unit organization; and (3) organizational factors, that is, the organizational culture, socialization practices for newcomers, particularly expatriates, and local and host-country perspectives on sojourners and expatriate management, and so on.

We show that an individual with higher CQ will tend to perform better in GWA than a similar individual with lower CQ. However, there may be attenuating circumstances at the individual, job, and organizational levels that can change that relationship. Likewise, the reverse is also true in that a lower CQ individual may not necessarily be more maladaptive in his or her work performance since there may be mitigating individual, job, and organizational circumstances in the GWA that can moderate the direct influence of CQ to performance.

### *Technical and Managerial Competencies*

Technical skills are often essential for GWA success since expatriates are often sent abroad because there is scarcity of technical skills among locals in host nations to perform the job. As a result, an important criterion for selecting an expatriate for a global work assignment is his or her level of technical proficiency. In fact, in many instances, expatriates are selected solely based on their level of technical competence.

In addition to engendering self-confidence and self-efficacy at work, technical competence is critical for the expatriate because of how host-country nationals perceive or what they expect of the expatriates (Hawes and Kealey 1981). In the eyes of the local coworkers, firms need to employ expatriates only because of their more superior technical skills. So, expatriates will command the respect and trust among the coworkers only if they are able to perform competently on the job.

For the expatriates, acquiring the necessarily technical skills sets for a global work assignment often requires them to broaden their technical knowledge beyond what is required of a domestic job. Because of differing technological development and legal and regulatory frameworks across nations, an expatriate with technical skills will need to understand the operate across a greater range of technological platforms and to function in comparative legal environments than a domestic technical specialist. For example, a domestic human resource director of a MNC will need to acquire new knowledge and understand the local employment laws in order to operate effectively as a regional or global human resource director. Similarly, a chief information officer will need to appreciate and operate with different technological standards and sometimes older generations of technology when crossing cultures.

In addition to filling technical positions that locals are unable to fill, expatriates are also sent abroad to fill high-level managerial jobs such as the managing director or head of department of the local unit, thereby making managerial skill the other critical competency required of them. In fact, even if expatriates are assigned purely technical positions in host nations, they are typically required to manage people effectively because part of their mandate is to transfer technical knowledge to host-nation coworkers. Tung (1994) found that compared to technical specialists in domestic positions, technical expatriates need to possess managerial or people skills because their role as technical expatriates often requires them to start a new production operation with the aid of local nationals. It is thus critical that they possess the requisite managerial skills to facilitate the transfer and exchange of tacit knowledge and information and to train host nationals on new technologies.

Given the importance of technical and managerial competencies of an expatriate in fulfilling his or her in-role position in a global work assignment, we would expect that the relationship between an individual's CQ to work performance to be moderated by his or her level of technical and managerial competencies such that the link will be strengthened considerably for an expatriate with demonstrated technical and managerial competencies. In contrast, we expect the link between CQ to work performance to be weakened considerably in cases where an expatriate is unable to demonstrate technical and managerial competencies in his or her assigned work overseas.

### *Job/Role*

Prior research on jobs in a domestic position has shown that the nature of job, particularly job design, determines the degree to which a newcomer or an individual is able to perform optimally at the workplace (Louis 1980; Nicholson 1984; Dawis and Lofquist 1984). Likewise, with expatriate jobs, job design can determine the ability for an expatriate to work effectively. According to Illman (1980), a good job design has a number of characteristics. First, it should spell out clearly the basic roles and responsibilities to be carried out by the incumbent; second, it should lay out the performance standards required of the incumbent; third, it should state clearly the authority and corresponding accountability granted to the incumbent.

In effect, prior research has found that the important job characteristics of an expatriate job should include greater role clarity, reduced role conflict, and greater autonomy or job discretion (Black and Gregersen 1991). Role clarity will minimize the uncertainty faced by the expatriate who is already overwhelmed with uncertainty derived from nonwork sources, such as social-cultural "shocks" and general living environment of the host nation. With role clarity, an expatriate is likely to minimize "role shock" (Torbiorn 1982), thus making role transitions less painful. Therefore, an expatriate with average level of CQ may still be able to perform well, provided that the job is designed with clear expectations.

A related dimension of the job to role clarity is role conflict (Jackson and Schuler 1985). A primary source of role conflict is the potentially conflicting dual allegiance required of an expatriate. In the tension between goals of local differentiation and global integration, an expatriate will often need to balance between the allegiances to the local unit and the parent organization. So, even if the incumbent possesses high CQ, unless the GWA spells out clearly expectations of the manager and resolves potential conflicting demands, role conflict could lead to detrimental effects on work performance.

Finally, another role dimension that is deemed critical in the design of a global work assignment is job discretion and autonomy. Role discretion allows the expatriate the flexibility to determine how work is to be accomplished. With greater latitude, the incumbent can absorb the uncertainty of role novelty and craft his or her strategies to get the work accomplished. Therefore, we would expect job discretion to moderate the link between CQ and work performance such that even for an expatriate with relatively low CQ, the latitude afforded by a job with greater autonomy and discretion will allow the individual to experiment with alternative behaviors and approaches in order to get the job done.

### *Parent Organization*

In addition to job characteristics, the organizational approaches to expatriation and views about GWA from both the parent and local unit organization could have significant influences on the expatriate success of a GWA. The parent organization strategy, culture, and human resource strategy toward expatriation can moderate the link between CQ and work performance of an expatriate.

In the field of international business, MNCs are seen to organize and design themselves in one of three dominant modes (Perlmutter 1969; Bartlett and Ghoshal 1989): (1) an ethnocentric mode with the parent organization operating as a central hub, and overseas subsidiaries operating as spokes. The parent company dominates the strategy and direction of the multinational corporation; subsidiaries are given minimal autonomy as decisions are highly centralized in the parent organization. An ethnocentric MNE design focuses on global integration and minimizes local responsiveness; (2) a polycentric mode, where the strategy is based on responsiveness to local markets, and the structure comprises a portfolio of relatively independent national companies in host nations. In such an arrangement, the parent organization typically exerts some minimal central control of technology and management systems, but much decision-making authority resides with individual subsidiary companies; and (3) a geocentric mode, also known as a transnational firm, where attempts are made to ensure both global integration and local differentiation. The strategy is based on balancing the complex paradox of responsiveness and scale, and the structure reflects interdependent subsidiaries differentiated by roles and capabilities, all interrelated in a complex integrated network of national organizations globally.

The organizing mode of the MNC can have a significant impact on the work systems of local units. The ethnocentric arrangement has few problems within and major problems outside the corporation; the polycentric and geocentric have fewer problems relating to the social environment. In an ethnocentric design, expatriates transferred from the parent organization to the local unit can expect greater standardization of work systems and therefore face less novelty in the work environment versus an expatriate who is transferred from an MNC that is polycentric or geocentric in nature. So, an individual with relatively low levels of CQ may find it easier to perform and work in a local unit where the parent organization has an orientation toward ethnocentrism. With an ethnocentric focus, the parent organization will have streamlined and created globally standardized local units in work processes and systems and organizational culture, therefore reducing the uncertainty at the workplace and presenting lowered role shock or culture shock to the incoming expatriate.

In addition to the MNC strategy and structure, the human resource strategy with respect to predeparture socialization and training programs for expatriation may also moderate the link between CQ and work performance. Predeparture programs, particularly intercultural training to work in a different culture, using a combination of documentary, experiential learning, and community exploration (Earley 1987; Black and Mendenhall 1990), have been observed to alleviate role and culture shocks. Therefore, we would expect that an individual even with relatively low levels of CQ will be able to work more effectively if he or she has undergone formalized and effective predeparture socialization programs afforded by the parent organization since such programs will mitigate the uncertainty faced by expatriates in global work assignments.

### *Local Unit Organization*

Once an expatriate arrives at the local unit, how effective he or she is at the workplace depends on how much host-nation coworkers are willing to orient or familiarize expatriates to the local work environment. An expatriate arriving at a local unit in a host nation is akin to a newcomer employed in a domestic position. Just as in the experiences of a newcomer in a domestic position, an expatriate will be able to contribute and work more effectively if the expatriate undergoes some socialization program at the local unit, where the individual is told and taught and learns what behaviors and perspectives are desired or appropriate within the local work setting (Van Maanen and Schein 1979). For expatriates with dual career spouses, some local units also actively undertake spousal assistance programs that provide assistance in obtaining a visa or work permit for the spouse to obtain local employment and assistance in working with the spouse on producing a resume and submitting it to appropriate local employment agencies (Pellico and Stroh 1997).

Sometimes even simple, somewhat mundane work details, such as getting an employment visa or work permit, opening a local bank account for wages, setting up a well-furnished and well-equipped office space, or providing expatriate with support staff such as administrative assistants, secretarial support, and computer technicians, can alleviate the initial hassles of settling into a work routine. Assigning lunch buddies from local nationals can also facilitate faster learning of the local work norms, values, and practices and prevent isolation and alienation. Social support from host-nation coworkers also acts as a buffer against work stress, since expatriates are made to feel that their presence is valued rather than resented.

Therefore, we expect that socialization programs and expatriate support from the local unit can moderate the relationship between CQ and expatriate work performance such that an expatriate with relatively low levels of CQ will benefit from the socialization programs where appropriate work behaviors are laid out explicitly, and there are local nationals who are around to offer support, counseling, and mentoring. In fact, we suspect that even for an individual with high CQ, he or she will be able to work more effectively and contribute more quickly if the local unit is actively involved in socializing and easing the individual into his or her new work environment.

## CQ and Repatriation in Global Work Assignments

Because global work assignments are temporary, typically lasting three to five years, most of those sent overseas eventually return to their home country and parent organization. Surprisingly, expatriates often find returning to the parent organization as challenging as, if not more so than, being sent on an overseas work assignment. In fact, Gullahorn and Gullahorn (1963) argued that a W-curve model more accurately depicts the entire process of global assignments, since the “W” depicts double U-shapes, whereas the second trough of the W-curve describes the reentry culture shock a sojourner faces on returning to his or her home country.

Past empirical research shows that, contrary to received wisdom, expatriates do indeed face very real and serious reentry culture shock. Black and associates (1999) found that 60 percent of American, 80 percent of Japanese, and 71 percent of Finnish expatriates found repatriation more difficult and experienced more problems than the original adjustment overseas. A primary reason for the difficulty in adjusting is that expatriates underestimated the changes that occur at home and are therefore mentally underprepared to face reentry culture shocks. After all, they are returning to their home country and parent company—presumably more familiar territory than a foreign assignment. Yet, the degree and types of changes that occur in their home country or parent organization can be significant to the extent that an expatriate may lose his or her identity during repatriation and feel like an alien in his or her home country.

On average, the repatriation failure rate (defined as those who returned from overseas assignments, but then decided to leave their parent organization within one year after repatriation) is about 25 percent (Black 1992b). This rate is alarming, given that one of the primary objectives of sending an expatriate overseas is to gain the critical international experience and to build sufficient global competence among the next generation of global managers and leaders. The high attrition simply means that the firm can gain no long-term return on its substantial human capital investment, estimated to approximate $1 million on each expatriate over the duration of the global assignment.

Because of the significant parallel problems expatriates face on repatriation, prior research on repatriation has concluded that repatriation should be thought of as another "overseas assignment." Much as GWA success is contingent on a host of individual, family, job, organizational, and country factors on foreign land, repatriation success is also dependent on a very similar set of factors at the time of repatriation in the expatriate's home country. Therefore, we will expect the GWA success model depicted in Figure 8.1 to apply in explaining repatriation success. Figure 8.2 presents the repatriation success model.

In the repatriation model, we will expect CQ to have a significant influence on repatriation success, as defined and conceptualized as adjustment to the home country, work performance in parent organization, and tenure at home organization. In addition, we would expect the Big Five personality characteristics to moderate the link between CQ and repatriation success.

Similarly, just as the case where spousal/family and country factors can moderate the link between CQ and adjustments in a host nation, we expect these same factors to moderate the link between CQ and adjustments back in the home nation

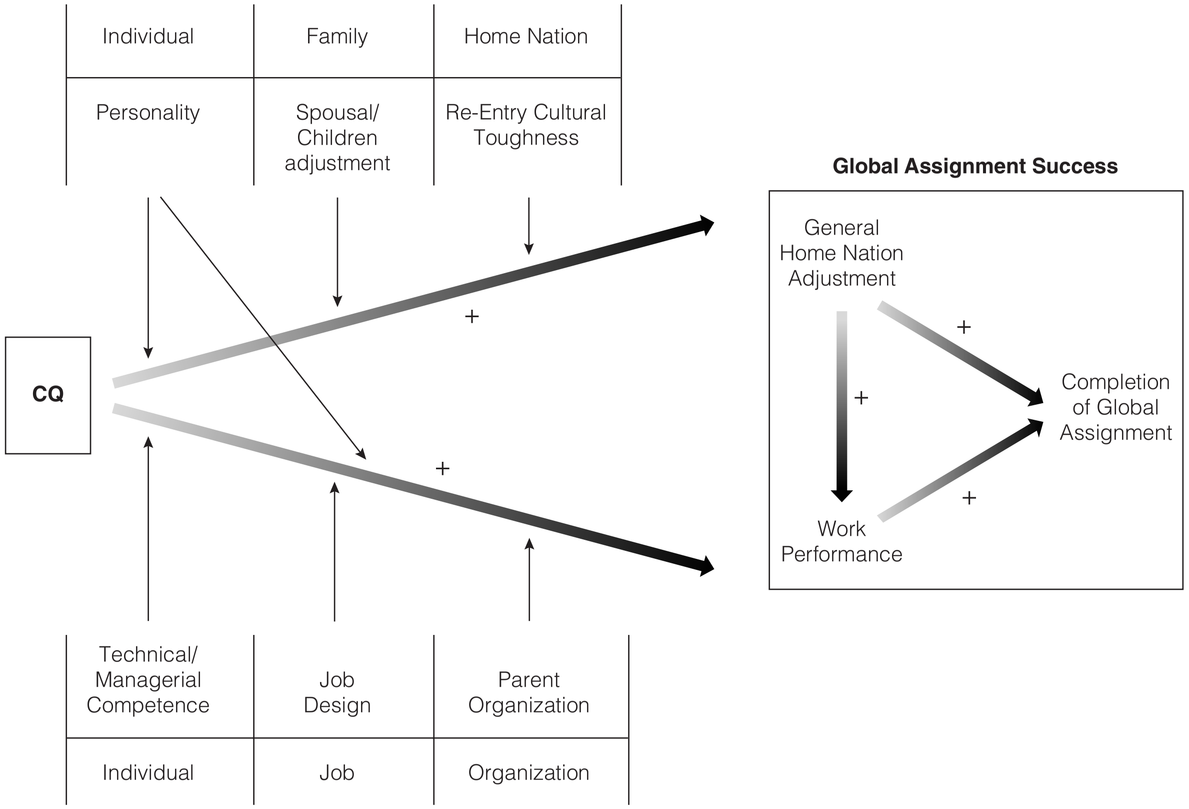
Individual
Family
Home Nation
Personality
Spousal/ Children adjustment
Re-Entry Cultural Toughness
CQ
+
+
Global Assignment Success
General Home Nation Adjustment
+
+
Completion of Global Assignment
+
Work Performance
Technical/ Managerial Competence
Job Design
Parent Organization
Individual
Job
Organization

Figure 8.2. A Multilevel Model of CQ and Repatriation Success

(the upper half of the model in Figure 8.2). For example, how well spouses and family members can adjust to repatriation will depend on the extent to which their original home country's social networks have remained intact or have been dissembled during the time the expatriate family was overseas. In dual-career situations, whether the spouse is able to find meaningful work in the home country after a spell of absence is also a strong moderator affecting how an expatriate is able to adjust back home. With regard to the cultural toughness or novelty of the home nation, much will depend too on the extent the home nation has changed during the period the expatriate family has been away in terms of the political climate, housing conditions, transportation systems, crime rate, pollution, cost of living, stage of economic development, and so on. Cultural toughness will also be determined by how contrasting the home nation is vis-à-vis the host nation along these same dimensions (Gregersen and Stroh 1997).

Depicted on the bottom half of Figure 8.2 are the moderators that can affect the relationship between CQ and work performance on repatriation. They include (1) individual-level factors, such as personality (that is, the degree of extroversion, openness, agreeableness, emotional stability, and conscientiousness to cope with reentry adjustments and work performance) and the relevant set of technical and managerial competencies to perform the new role and job on repatriation; (2) job factors, such as the job assigned to the expatriate on repatriation—whether the job is clear, unambiguous, and utilizes the skills and expertise gained from the overseas assignment; and (3) organizational factors, such as the extent of organizational change in structure and process, especially changes in supervisors and coworkers, and any formalized reentry socialization, the assignment of a sponsor or mentor for each expatriate, and orientation or training for returned expatriates.

## SUMMARY

We have presented a model that relates CQ to global work assignments. In the model we start with the premise of the importance of CQ of an individual as it relates to GWA success. We expect individuals who possess higher levels of CQ to have a greater chance of succeeding in global work assignments than those with lower levels of CQ. However, the model recognizes that a simple CQ-GWA success link may in fact be too simplistic.

In fact, we recognize, and therefore examine, myriad factors—work versus nonwork, individual versus family, parent versus local unit, organizational versus national—that can moderate the relationship between CQ and GWA success. We show that under some circumstances, for example, good socialization tactics practiced by home and host nations, a person with low CQ can actually adjust well and succeed in GWA. In other situations, such as difficulties faced by a spouse in adjusting to a foreign land, even a person with high CQ may not perform well in GWA. In this model, we show that repatriation is simply the flip side of expatriation. The link between an individual's CQ and his or her success on returning home is also moderated by a similar set of factors surrounding the issue of repatriation.

# 9

# INTEGRATION AND APPLICATION: DIVERSITY WORK ASSIGNMENTS

A significant challenge facing modern organizations is how best to utilize and integrate the various talents brought forth by members coming from diverse backgrounds and experiences (Jackson and Associates 1992). How can organizations best make use of the diversity that exists in most work organizations? How do individuals use their own knowledge and skills about interpersonal awareness to avoid potential pitfalls in social encounters? Most importantly, what role might CQ play in helping us understand why some people seem much more capable of integrating their interests with those of diverse others?

Organizations rely increasingly on teams diverse on multiple characteristics including membership backgrounds and traits (Hollenbeck, Ilgen, LePine, Colquitt, and Hedlund 1998). As a result, employees face complexity in how to define those with whom they work. Identities, or psychological representations of diversity characteristics, are what employees rely on in identifying, and relating to, other employees involved in their work encounters (Stryker 2000). A highly diverse workforce implies that many possible identities exist for team members; therefore, numerous identities can be used to classify fellow team members. Furthermore, members of a diverse team may differ in their perceptions of what are the key identifiers of fellow team members (Earley and Mosakowski 2000).

Agreement among team members regarding personal identity is of great consequence to what unfolds over the life span of a team. McCall and Simmons (1978, 143) argue that establishing the identities of others in a situation is "a necessary prerequisite to the execution of other social tasks." Some researchers similarly argue that a shared understanding of identities is needed to know what behavior is appropriate, and Earley and Mosakowski (2000) argue that establishing role identities is a critical feature of effective multinational teams. Team members who share a common perspective achieve enhanced performance as a result of trust and positive affect generated within the team (Klimoski and Mohammed 1994). Despite the seemingly obvious importance of congruent perceptions concerning member identities, little is known concerning the antecedents and nature of agreement regarding team-member identities.

As individuals join various social entities (for example, a work team) they engage in a categorization process to understand with whom they are working (for example, Fiske and Neuberg 1990). Members classify one another into the in-group (one's self and others who are similar with respect to some characteristic) and out-group (those who are different on the basis of the characteristic) based on perceived similarities and differences (Jackson, May, and Whitney 1995). The characteristics used in making group classifications are those most salient to a person based on their background and current work context (Hughes 1971).

Although a single identifying characteristic may be pertinent in describing others, multiple characteristics may be used as well (Hughes 1971; Lau and Murnighan 1998). For example, a team member might view fellow members based primarily on functional background and secondarily on characteristics such as race or gender (Earley and Gibson 2002; Hughes 1971; Lau and Murnighan 1998). Organizational research does not typically acknowledge that multiple diversity characteristics influence people's perceptions in social situations even though evidence suggests that organizational members themselves do consider such multidimensionality (Hughes 1971). For example, Hughes (1971) distinguished between primary and secondary status-determining characteristics and argued that these should be considered together in determining a person's social status. He illustrated this point by describing the social status of an African-American physician to a white patient and suggested that the primary status characteristic of profession (physician being high status) was interpreted by the patient in terms of the secondary characteristic (black being lower status in the mind of the white patient). Profession alone was inadequate to understand the status afforded to this person by his patient. Another example of how organizational members consider multiple characteristics is described by Dickens and Dickens (1982) who found that interracial mentoring relationships that integrated both professional and racial identities better facilitated minority protégé career development.

Thus, describing a person's identity using multiple characteristics implies a hierarchy of identities (Hughes 1971; Lau and Murnighan 1998; McCall 1978). McCall and Simmons refer to a salience hierarchy as "the relative order of priority [of identities] as possible sources of performance in a situation" (1978, 82). Identities that are higher in the salience hierarchy are more relevant to an individual in describing members of his or her team and reflect more prominently in perceptions of others. People try to keep behavior consistent with their most salient identity (McCall and Simmons 1978; Stryker 1980) just as they use salient categories to process incoming stimuli after a priming intervention (Brewer and Gardner 1996; Brewer 1993; Hughes 1971; Lau and Murnighan 1998; McCall 1978; Wyer and Srull 1980, 1989).

Thus, it should be clear that the definition and understanding of others who are from diverse backgrounds requires an elaborate processing of traits. What prove to be the most salient traits in helping to define others varies according to a salience hierarchy that is largely unique and idiosyncratic to each person. That is, my trait identity hierarchy may vary a great deal from others even if they are from my same culture. This is because we may share a common culture, but our individual experiences may make some traits salient over others.

Likewise, this same type of argument may be extended to cover other personal differences such as knowledge and skills. Understanding people from a common culture but who have varying backgrounds may prove to be nearly as challenging as understanding people from entirely different societies. The primary difference between interpersonal diversity and international diversity in this usage is the amount of overlap in generally accepted axioms and definitions. For example, people in the United States may well agree that race is a key characteristic of diversity, and people in Brazil may focus on socioeconomic status. Within the United States, people will generally agree that race is a highly salient feature of people although what race means across individuals may vary (for example, when the first author lived in southern California, many people focused on differences between the Anglo and Latino communities, whereas when the author lived in the Midwest the emphasis seemed to shift to Anglo versus African-American communities).

## DIVERSITY MANIFESTED IN WORK ORGANIZATIONS

### Individual-Level Diversity and Self-Concept

The importance of cultural intelligence in a diversity context for individuals is best understood through the conceptual framework of self-concept (Gecas 1982; Kihlstrom et al. 1988; Kitayama 1999; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997). We described our approach using a self-concept perspective earlier in Chapter 3, so we briefly expand on this earlier discussion. In addition, we examine the relationship of the diversity literature to existing models of self-concept as a means of linking CQ to individual behavior and actions.

The enduring attachments and commitments to the social environment help define a person (Sandel 1982). Bandura (1986, 1997) proposed that the self-concept is a composite view of oneself that is formed through direct experience and evaluations adopted from significant others. More generally, it was proposed that the self-concept is shaped by the shared understanding within a particular culture of what it is to be human. Similarly, sociologists (Gecas 1982) have defined the self-concept as anchored in the social system and as a reflection of the responses and appraisals of others. The reference group's norms become the internalized standards against which individuals judge themselves. Thus, the self is modified to a great extent by the general cultural and work context.

Self-relevant information is processed, stored, and organized into mental structures, or schema. The self is viewed as a mental representation of personality, formed through both experience and thought, and encoded in memory alongside mental representations of other objects, reflected and imagined, in the physical and social world (Kihlstrom et al. 1988). It is a system of self-schemas or generalizations about the self derived from past social experiences. A schema is hypothesized to have a dual nature of structure and process. As such, the self is both the knower and what is known (Markus and Wurf 1987). The content of self-conceptions and identities form the structure and anchors the self in the social system, whereas self-evaluation deals with the dynamic dimension of the self (Gecas 1982; Kihlstrom et al. 1988; Kitayama 1999; Markus and Kitayama 1991; Markus, Kitayama, and Heiman 1997). The self can be viewed as a collection of schemas, prototypes, goals, or images that are arranged in a space (Sherman, Judd, and Bernadette 1989) with each schema a generalization about the self, containing descriptive information about traits, roles, and behavior, as well as procedural knowledge of rules and procedures for making inferences (Kihlstrom et al. 1988). A person's self-concept can be thought of as a collection of ideas and images concerning the state of an idealized and a real world. Most importantly, it acts as a filter for incoming information received.

Self-regulatory processes operate in the service of developing and maintaining a positive representation of the self. Thus, the self-concept is to a large extent an agent of its own creation (Gecas 1982). Erez and Earley (1993) focused on three motives in the service of the self: (1) self-enhancement motive, seeking and maintaining a positive cognitive and affective state about the self; (2) self-efficacy motive, a desire to perceive oneself as competent and efficacious as well as to grow and challenge oneself; and (3) self-consistency motive, a desire to sense and experience coherence and continuity. With this framework, Erez and Earley proposed that self-concept is regulated by culture as well as other contextual features (for example, work environment) as they impact the self-motives. For example, a cultural syndrome such as power distance is reflected in a person's self-schema as respect for authority, deference to seniors, and so forth. Self-concept is shaped, in part, by these various cultural influences on an individual as well as the person's unique experiences. More importantly, Erez and Earley argued that these three motives regulate a person's actions in a cultural context. An individual high on self-enhancement will seek out situations that provide opportunities for recognition, while an individual high on self-efficacy will take on new challenges as a means of expanding his or her accomplishments and learning opportunities.

It is the first motive of self-enhancement that is of key importance during the early interactions of people from diverse backgrounds. When individuals first encounter others who are dissimilar there is a comparison process that takes place and part of this comparison is based on a desire for self-enhancement (Hughes 1971; Tajfel and Turner 1986; Turner 1987). That is, when people meet people with a dissimilar background they seek to understand their status relative to these other people through various comparisons and inferences. Tajfel's work on categorization theory suggested that at least one comparison mechanism was an active enhancement of in-group in favor over the out-group resulting in an in-group bias. Brewer (1993) suggested that this comparison process involved an optimal level of distinction between self as member of a group and self as distinct from a group (a balance of individuality versus collectivity). Earley (1997) argued from a face theory perspective that enhancement was the product of two general sources (internal, external) that vary in relative importance according to social and cultural context.

Taken from this perspective, individual-level diversity reflects what is more commonly referred to as personal role identity (Stryker 1980), or the self-image that individuals have for themselves. In other work, the first author proposed a model focusing on a person's self-concept as manifested in the notion of face (Earley 1997). Drawing from various conceptual frameworks (for example, Brown and Levinson 1978; Goffman 1959; Hu 1944; Ting-Toomey 1988), Earley proposed that much of a person's behavior in a social and cultural context can be understood from a person's "face" defined as:

> *the evaluation of self based on internal and external (to the individual) judgments concerning a person's adherence to moral rules of conduct and position within a given social structure.* This definition captures two general facets of self, namely, moral conduct and position in a social setting. Further, it posits that these facets are based on judgments of self and others in combination. Thus, face is not simply a product of self-perceptions nor is it a result of external evaluators' perceptions alone. (1997, 41; emphasis in original)

A person's face reflects both an inner concept of self as well as one that is projected for the public, and these two do not need to be entirely overlapping. (Quite the contrary, it seems that these inner- and outer-directed selves are often very distinct from one another, and this may be problematic for a person.) This idea of an image projected versus an inner perspective is reflected by Goffman's dramaturgical analysis (1967) using the terms of front- and backstage to represent what is shown to others versus reserved for self.

From the perspective of cultural intelligence, it is important to understand that a person's interactions and reactions to any given situation reflect many influences and a person's attempt to self-regulate face and self-presentation. That is, diversity reflects difference among individuals in their perceived role identity as well as the social self that they present to others, or what we called "face." Take, for example, a person who has just entered into a new cultural setting and observes a member of the target culture engaging in a lot of posturing and outward demonstrations of self-importance and status (bragging, emphasizing personal titles, and so on). Is this a characteristic of a high power-distance culture as one might guess? Or is this particular individual concerned about his or her status in front of strangers as an idiosyncrasy? Much of what people attribute to cultural influences is often a reflection of individual-level diversity, or the unique aspects of what distinguishes one person from another.

Personal habits and behaviors may be misattributed as a cultural trait. These personal behaviors may be related to culture, but they are as likely an idiosyncrasy. As an example, the first author uses an intercultural exercise called BaFa BaFa as a means of illustrating individual versus cultural differences. In the simulation, two cultures are established and visitors from one culture are required to interact with their companion culture in an attempt to discover the rules for proper conduct in the target culture. After limited visitation to the other culture, a representative from one culture debriefs his or her fellow cultural members concerning the other culture. One of the cultures emphasizes physical contact and closeness with conversations generally involving touching and hugging each other. However, one time when this simulation was run there was a participant in the "physical" culture who was personally very uncomfortable with touching his classmates during the exercise. His resolution of this discomfort was to touch his foot to others as he spoke with them (contact with their feet so that shoes touched one another). When a representative from the foreign culture observed this behavior, he concluded (and debriefed his culture about it) that this culture was very "foot obsessed" and that this was a key to communicating effectively in the culture. Needless to say, this erroneous inference was based on a single idiosyncratic action of an individual adjusting to his culture's norms for interaction.

The generalization of personal idiosyncrasy to inferences about cultural values, norms, and syndromes is one of the most common pitfalls facing an expatriate manager. The high CQ person is able to distinguish between a person's idiosyncratic actions and general cultural norms for behavior. However, this is one of the most difficult aspects of intercultural understanding—separating personal eccentricity from cultural norms for appropriate behavior. With high CQ, a person looks for stable patterns of behaviors across individuals and settings to infer what is personal versus general for a given culture. This may require the development of new metamodels for behavior or the adaptation of existing ones. At a minimum, it requires the use of a metacognitive framework for determining what is individual versus collective.

When a person observes people from other cultures, they are likely to make generalizations of individual actions to the entire group from whom the member comes. A high CQ person is able to separate idiosyncrasy from cultural patterns. This same point can be made in a diversity context. When people from diverse backgrounds come together they may quickly attribute group characteristics based on individual behavior as well as interpret individual behavior in terms of their preexisting ideas concerning the person's role groups. What differs between an international context and an intranational (but diverse) context is that the various subgroups that may exist are likely better understood by a fellow countryman (for example, having lived in Los Angeles for ten years, I may not know an extensive amount about the Los Angeles Latino community but I am likely to know more about it than I do about Maori people of New Zealand). Additionally, the actions and their ascribed meanings are likely to be closer and more easily recognized by a person from the same country than a foreigner. So the individual diversity situation reflects a person's ability to understand the actions and intents of another person based on a partially shared meaning system. This may imply that less metacognitive processing is required since many existing cognitive routines for sense-making social dynamics may be appropriate. The degree that these shared meanings are imperfect suggests that high CQ will provide additional benefits for figuring out what is going on in another subculture.

## Team-level Diversity

A natural extension of individual-level diversity is that of a person's identity within an immediate social context, such as a work team. Here we refer to team-level diversity as the various role identities that individuals have as they interact with others in a specific and defined group of people. Without going into excessively elaborate definitions and construct validation of what constitutes a work team, for our purposes we define a "team" as three or more individuals having interactivity in order to perform some common action (for a more complete description the reader is referred to various sources, including Hackman 1987, 1990; McGrath 1984).

There are a number of important features of a work team from a diversity perspective (some of the following section is adapted from Earley and Gibson 2002, chap. 2). Homogeneous team members generally report stronger affinity for their team than heterogeneous team members (Ibarra 1992). Attitude similarity and demographic homogeneity have generally been shown to be positively related to group cohesiveness. Demographically similar groups tend to exhibit higher satisfaction, and lower absenteeism and turnover (for example, Jackson et al. 1991).

These findings are consistent with the well-established principle that people are attracted to similar others (Byrne 1971) and with the proposition that heterogeneous groups experience more conflict (Jehn, Northcraft, and Neale 1999). Indeed, research indicates that cultural diversity generates conflict, which in turn reduces the ability of a group to maintain itself over time and to provide satisfying experiences for its members (Earley and Mosakowski 2000; Ravlin, Thomas, and Ilsev 2000). Team heterogeneity has certain structural effects, such as increasing coordination costs (for example, Steiner 1972) and changing the number of opportunities that culturally different members have to interact with one another (Blau 1977). The distinctiveness of particular cultural characteristics is important in that the more distinctive a person is, the more self-aware he or she becomes. This self-awareness leads a person to compare his or her behavior with the perceived behavioral standards of the group. It also makes it more likely that an individual's cultural norms for group behavior will vary from those of the group.

Heterogeneity in top management teams has demonstrated some positive effects on performance. Organizational demography researchers often use external observable traits as surrogates for internalized mediating psychological states (for example, Lawrence 1997). Because so few members of top management teams are women and minorities, this research has investigated the impact of other demographic characteristics such as education and work function. For example, based on data from 199 banks, Bantel and Jackson (1989) concluded that both diversity of education and diversity of work function were positively related to measures of innovation when other factors such as organization size, team size, and location of operations were held constant. Hambrick and colleagues examined a large sample of actions and responses of thirty-two U.S. airlines throughout eight years. The top management teams that were diverse, in terms of functional backgrounds, education, and company tenure, exhibited a relatively great propensity for action, and both their actions and responses were of substantial magnitude. But they were also slower in their actions and responses and less likely than homogeneous teams to respond to competitors' initiatives.

Ginsberg (1990) developed a sociocognitive model of diversification that grounds the role of top managers' belief systems in the cognitive and behavioral attributes of corporate strategy. He argued that characteristics such as *complexity* and *consensus* reflect the learning capacities of the top management team and are associated with the abilities of its members to collect and interpret information and to communicate among themselves. These capacities, in turn, influence decisions that pertain to diversification. These two capacities are particularly pertinent to our discussion of multinational teams, because in his framework, complexity is determined by two interdependent aspects: (1) differentiation, that is, the number of constructs of the system; and (2) integration, that is, the nature and extent of rules for integrating these constructs. Consensus, by contrast, reflects the extent to which a diverse set of assumptions or beliefs has been synthesized into a commonly shared understanding.

At least one way to understand the internal functioning of teams is through the roles and identities that members have as they interact (Earley and Mosakowski 2000). Identity Theory (Stryker 1980, 1987, 2000; Stryker and Serpe 1982) holds that behavioral response patterns that are unique to situations involving group membership are organized as identities (for example, a person has separate identities as a student, a family member, and as an employee). Identity Theory explicitly brings social structural constraints into a symbolic interactionist conception of the self. In this theory, separate identities are ordered in a "salience hierarchy" for which highly salient identities are more likely to be evoked in response to a given situation. The salience of an identity is based on the individual's level of commitment to his or her social networks. Stryker defines commitment as "the costs to the person in the form of relationships foregone were she/he no longer to have a given identity and play a role based on that identity in a social network" (Stryker 1987, 90).

One factor that this framework specifically recognizes as affecting the relative salience of identities is the social context of an individual (Earley and Laubach 2000). Normative control evokes identities whose behavioral patterns are constructed around merged interests with the organization. Another factor influencing the salience of identities is the cultural context of the individual actors, as expressed in their culture-related values. For example, a worker from a highly universalistic culture (Trompenaars and Hampden-Turner 1998) would tend to have a higher commitment to an identity that reflects following standard procedures and rules regardless of the context. In a team context, this orientation might only extend to the relevant work group, or it may extend well beyond it depending on other cultural influences. An important point is that each team member possesses his or her own personal identity that must interact with others in the team. If one's team has an individual having a strong universalist perspective along with members who are more particularistic in their views (rules are applied according to the unique context in which they are used such as giving preference for family members in job hiring), then the resulting conflict may be significant.

For our purposes, we focus on CQ from the view of someone within a diverse team and what this might imply about team functioning. Because people generally seek to reinforce their self-concept through an enhancement of their existing roles, they tend to be attracted to others of a similar background (Turner 1987). However, this does not necessarily mean that the Singaporeans will group together, the French will group together, and so forth. This is because a sense of national origin may not be the hierarchically dominant identity for a person. Thus, a Singaporean team member may find him- or herself wanting to interact with others on the team having a similar functional background, or a French team member may be attracted to members sharing a common educational background. This might lead a Singaporean to group with team members having completely different nationalities but a common functional experience. Role identities are a key to understanding those individuals who are likely to reinforce a person's sense of self or face.

Cultural intelligence from a team-diversity perspective can be thought of functioning outside-in or inside the team. That is, we can view CQ from the perspective of an outsider who is attempting to understand a given team, or from the viewpoint of an insider trying to understand his or her own team dynamics. From an outsider's viewpoint, CQ functions similarly as we described for the individual-level diversity case but with the added complexity of trying to understand the interactions among members and how this impacts their actions. A high CQ person is able to observe the various interactions and determine the dominant role identities for each team member, how these identities lead members to interact mutually, and how the work context of the team might make certain identities more salient than others. Fully considered, this is a daunting task for even the keenest of observers since there are myriad interactions and explanations for these interactions possible. What distinguishes the low from high CQ person is a set of metacognitive models for observing, cataloging, and analyzing team-member behavior. This requires a thorough analysis of pattern from idiosyncrasy. Further, the work context will influence team members' interactions (Earley and Gibson 2002) to a large extent and this information must be analyzed as well.

From an insider's perspective (team member), CQ provides a benefit of not only understanding through cognitive mechanisms but also helps a member persevere when confronted with the difficulties of dealing in multiple cultures and subcultures. The difficulties that we described elsewhere in the book are present from a dyadic exchange across cultures, and a person must interpret and infer intentions from others as they interact among themselves.

What distinguishes this discussion from a truly international work team setting is that we are referring to intranational rather than international diversity. Thus, the general actions and behaviors of team members is likely to be interpreted using existing cognitive models of behavior appropriate to a single society. Although the practices and views of people from diverse backgrounds and experiences may be highly variable, we are still talking about behaviors within a single national context. Does this mean that the interactions of team members are transparent to the observer? Of course not. However, we are suggesting that even within highly diverse teams having a common national origin there is a common sense of actions and rules that aid people as they interact with one another. Take as an example the expression of political correctness across societies. Within the United States there is a strong norm of political correctness (respecting one another's differences attributable to personal characteristics such as age, race, religion, and so on) in the business environment. This does not imply that all U.S. Americans believe in equality and function without bias; however, the expression of bias is not considered acceptable in the workplace. Such an emphasis is not seen as important in other societies and personal characteristics may form an important basis for judging others. In a team having members all from the United States, a general norm for political correctness will exist. If this norm is broken there are formal (sometimes legal) and informal (sometime ostracizing the person) mechanisms that regulate behavior. A high CQ person recognizes that in addition to individual differences there are common influences on behavior and action as well. Thus, a team member operating within a given societal frame will be observant of existing norms of the team and will seek to understand these norms before interacting with others.

In addition to general cultural norms, there are norms and rules that teams develop to govern their own activities. High CQ means that a person can determine these norms so as to comply with them. However, a high CQ member does not merely react passively to these rules and practices, he uses the existing rules as a way of furthering his personal agenda. For example, leadership scholar Kets de Vries (1988) describes the process of leading from a psychoanalytic perspective and capturing ideas of transference and attachment. A charismatic leader is one who instills within his or her followers a sense that his or her problems are their problems. She or he does not merely react to the challenges facing his or her followers, rather he or she creates a sense of urgency within them concerning the problems he or she finds most critical. Thus, a charismatic leader transfers followers' identities onto her or him to create a sense of urgency in their actions. He or she argues that for leaders to be effective there must be a congruence between their own and societal concerns.

The essence of the charismatic leader is a projection of personal struggles into a shared, or universal, concern, which societal members (followers) try to solve collectively. For example, in an individualistic society, such as the United States, a leader must struggle against the situation as an autonomous agent. An effective leader creates a feeling of the underdog in his or her followers so that they adopt the leader's struggle as their own. In a collectivistic society, such as the People's Republic of China, the social relation of leader to follower (and social protocols) dominates the leader's attention. The collectivistic leader must struggle to maintain the social structure of his or her in-group so that it will confront challenges. Thus, charismatic leaders transfer struggles to their followers through very different mechanisms, although both types of leaders rely on a personalized relationship with their followers (Erez and Earley 1993).

One of the most effective ways for charismatic leaders to transfer these struggles to their followers is through myths and symbols. Kets de Vries argued that leaders are ideal recipients for the "crystallization of primitive and unstable identifications" (1988, 243) as a result of transference. In other words, a charismatic leader becomes a group ego and conscience to handle the followers' anxieties as well as the embodiment of the followers' favored past relationships. A paternalistic leader assumes the role of father figure in a society, endorsing a strong and controlling relationship among parents and children. From a cultural viewpoint, it becomes clear that the charismatic trait reflects different characteristics, or themes, across cultures. Thus, the struggles of Gandhi capture relevant facets of Indian culture but not necessarily of American culture.

Similarly, a high CQ person does not merely observe passively and analyze a situation and context. She or he promotes her or his interests and goals by using the dominant cultural themes to solidify support. As a team insider, she or he acts somewhat like a charismatic leader by drawing on existing norms and symbols as a way of moving the team in a desired direction.

A charismatic leader is effective in his or her organization, but this does not mean that he or she will be effective in all organizations. The charismatic leader of one organization does not necessarily capture the hearts and minds of followers from a different organization. (Whether the skills of a charismatic leader transfer across organizations and situations is debated within the leadership field. For our purposes, we adopt the position that a charismatic leader's abilities are situation specific.) However, a high CQ team member is able to use these proactive and directive skills regardless of his or her team's composition and situation. This occurs because he or she understands the important themes for each team in a particular circumstance and how they may vary across settings. The nature of the work setting is a central part of understanding the importance of CQ and diversity since it provides the background in which actions take place.

### Organization-Level Diversity and Change

The general background for work interactions is an organization's culture or climate (Schein 1985). It provides a general frame for interpreting the meaning of social interactions and people's actions. It is a critical element for a person seeking to understand the functioning of diversity across organizations.

Culture can be defined on different levels of analysis ranging from a group level, through an organizational level, to a national level. Independent of the level of analysis, culture can be defined as "what a group learns over a period of time as that group solves its problems of survival in an external environment and its problem of internal integration" (Schein 1985, 111). Following this definition, any definable group with a shared history can have a culture, and within one nation or one organization there can, therefore, be many subcultures (Schein 1985; Triandis 1972). Once a group has learned to hold common assumptions about adaptation to the environment, its members respond in similar patterns of perception, thoughts, emotions, and behavior to external stimuli.

In homogenous societies, the norms and values of various in-groups are relatively homogenous, and they form tight cultures. However, heterogeneous societies have groups with dissimilar norms and values and, consequently, a loose culture is formed (Triandis 1989). The strength and degree of internal consistency of a culture are functions of the homogeneity across groups, the length of time the groups have existed, the intensity of the groups' experiences of learning (Schein 1985), and the generalizability of the norms and rules of behavior across situations. Loose cultures seem to be more tolerant of deviant behavior than tight cultures.

Another useful perspective on organizational culture was presented and evaluated by Martin (1992). She presents a characterization of three general forms of organization culture, namely, integration, differentiation, and fragmentation. Briefly, an integration view posits culture as shared meanings held in common. The differentiation view points out that there exist subgroups within any given organization that likely differ in their shared meanings from one another. Finally, a fragmentation perspective suggests that culture is a differential network of meanings that are interrelated and reciprocally related but ill-defined and inconsistent. The integration view is a main-effects perspective, while the differentiation perspective reflects differences within a firm but across existing subgroups. A fragmentation view, one that is endorsed by Martin as most accurate of organizations, is best thought of as some form of individual differences or variation. From Martin's analysis, it should be clear that culture is not simply a monolithic construct capturing all of the minds within a given society.

An additional framework that is very useful for understanding the nature of organizational culture and context was proposed by Goffee and Jones (1998). In their model Goffee and Jones developed their framework in response to a number of changes in modern organizations. As the vertical and lateral contours of organizations altered, so too the language of organizational analysis changed. They observed that what holds organizations together were not reporting relationships, functions, or departments, but rather more fluid, shifting relationships of collaboration and interdependence (Goffee and Scase 1995).

Goffee and Jones offer a framework to understand various social architectures that characterize distinctive organizational cultures. Their focus is on the way values, attitudes, and behaviors are shared within organizations and how they are shaped by various organizational relationships. Their model was developed using concepts arising from Durkheim's notions of sociability and solidarity (1933). Sociability refers primarily to affective and noninstrumental relations between individuals who are likely to see one another as friends or companions. Friends share certain ideas, attitudes, interests, and values and the inclination to associate on equal terms. So defined, friendship groups frequently constitute a primary unit in sociological analysis of status groups and of social class (Goffee and Jones 1998); it represents a type of social interaction valued for its own sake. It is frequently sustained through continuing face-to-face relations typically characterized by high levels of unarticulated reciprocity; there are no "deals" prearranged. Solidarity, by contrast, describes task-focused cooperation between unlike individuals and groups (Durkheim 1933). It does not depend on close friendship or even personal acquaintance, nor is it necessarily sustained by continuous social relations.

One point that Goffee and Jones make in their discussion of these two general social forces is that they are often confused with one another with an implied interdependence that does not necessarily exist. For example, it is often assumed that the parallel pursuit of goals by members of an organization implies that they are operating cooperatively and socially. That is, the coincident pursuit of common goals implies that there is a social bond uniting people from an organization. However, this need not be the case since organizational members may doggedly pursue common goals even when they do not bond to one another socially. Likewise, social interaction outside of the workplace for high sociability cultures does not imply that these individuals are expressing high solidarity. This type of extra-organizational encounter may simply reflect friendships that are expressed outside of one's organization. To cooperate in the instrumental pursuit of common goals does not require that individuals like one another. Likewise, strong and intimate friendships seem less likely for employees who are strongly goal focused since work may interfere with social bonding.

Sociability and solidarity are presumed to vary independently, and Goffee and Jones use this notion to create a 2-by-2 typology of organizational cultures, using a dichotomous ranking of cultures as either high or low for the two dimensions (Goffee and Jones 1998). This categorization process results in four distinct organizational cultures including: fragmented (low sociability, low solidarity); mercenary (low sociability, high solidarity); networked (high sociability, low solidarity); and communal (high sociability, high solidarity).

A fragmented organization lacks sociability and solidarity. It might seem that such an organization is unlikely to survive since it appears neither goal focused nor pleasant to work in. However, there may be some reason to believe that fragmented organizations may be able to maintain themselves. For example, organizations that rely heavily on outsourcing and those that rely largely on the contribution of individuals who lack interdependence may be predominantly fragmented. Fragmented organizations derive benefit from the autonomy and freedom that are granted to members. Partners in professional firms, for example, possess considerable discretion to set their own work agendas and develop their professional talents without external intervention. Likewise, entrepreneurial companies may largely succeed on the basis of one or two individuals who act somewhat independently. An entrepreneurial environment may provide the dynamic conditions for individual creativity to flourish. Individuals who seem to fit into a fragmented work culture appear to have the following traits: introverted, learning best through self-contained reflection; motivated by autonomy and independence; analytical rather than intuitive; capable of managing their own development; and able to separate idea evaluation from personal relationships.

The difficulty of the fragmented work culture is that the individualistic focus may result in members pursuing their own agendas even when a coordinated effort might be needed for the company to survive. The individual freedoms experienced by members are abused and excessive selfish and hedonistic actions lead to conflict and infighting. Organizational identification can be reduced to levels where it is virtually forgotten, and simple attempts at cooperation are undermined by disruptive behaviors of organization members. Lacking some coordinated efforts, it seems unlikely that fragmented organizations will remain stable or flourish over time. Much more likely is that these organizations will succumb to the disunity that characterizes them.

In mercenary organizations, a heightened sense of competition and a strong desire for success is a central feature. Dominant values are focused on a competitive individualism through personal achievement. This does not imply the fragmented pursuit of personal glory at the expense of the organization. Quite the contrary—individuals' goals are aligned with the needs of the organization in a mercenary culture. Individuals may cooperate with one another extensively to produce benefits for themselves and their organization. This results in a type of teamwork that can be highly successful so long as the team members maintain a consistent perspective on the goal of their work. More mundane activities are rarely characterized by high levels of cooperation because individuals pursue their individual goals with great focus and direction. If another organizational member facilitates this goal pursuit, then a cooperative relationship may evolve. However, if someone interferes with goal achievement then they are viewed with disdain and are moved aside. Organizations with a mercenary culture typically benefit from a clear understanding of purpose and the ability to mobilize resources swiftly in order to achieve ends.

Members of mercenary cultures are attracted by their meritocracy and intolerance of poor performance, their willingness to openly address conflict, and a drive to measurably improve standards. They have the following characteristics: goal oriented and focused on completion of tasks undertaken; motivated by clarity and structure rather than ambiguity; instrumental in their work relations; competitive and success driven; and confrontational.

The benefits of a mercenary culture for business organizations operating within competitive market economies are clear. Organizations having a strong goal focus consistently outperform their counterparts (Mosakowski 1998a, 1998b). However, high solidarity is not always beneficial alone since a mercenary environment is one characterized by mistrust of one another, competitiveness, low helping behavior unless it is instrumental for one's own goals, and so forth. An emphasis on goals also may be problematic under conditions of workplace ambiguity and environmental uncertainty (Mosakowski 1998a). Alignment of management directives may be problematic and a strong goal myopia may prove problematic as new work conditions arise (Staw and Boettger 1990). Low levels of sociability indicate limited emotional involvement and, therefore, a relatively brittle psychological contract. Even a momentary misalignment of individual and organizational interests can be enough to produce disaffection and the loss of organizational members.

Networked organizations exhibit high levels of sociability with relatively low levels of solidarity and are often characterized by strong loyalty, family atmosphere, clublike behavior, and a strong emphasis on social events and rituals that reinforce the sense of community within the organization. These rituals and social events serve to sustain a strong sense of intimacy, loyalty, and friendship and often extend beyond the boundary of the organization with employees engaging in various social activities and networks outside of work. These strong relationships and friendships do not translate into a productive work environment. Although one might expect that strong social networks would mean extensive information sharing across business units within a highly networked organization, this is not at all the case. In such an organization, individuals belong to very specific and defined networks that can be best thought of as cliques and niches that are exclusive and not inclusive. As a result, information is shared very extensively within a given clique but not at all across them. This means that organizational activities such as the sharing of best practices are problematic. It is a mistake to assume that very high levels of sociability imply that individuals will compete cooperatively. Friendships may constrain open expression of differences that are necessary for developing and maintaining a shared sense of purpose. Several authors have commented on a societal-level version of these strong but cliquish networks in a Chinese context focusing on what is referred to as *guanxi* (Bond 1997; Bond and Hwang 1986; Farh et al. 1998). Guanxi reflects a set of social networks and structures within Chinese culture dependent on norms of reciprocity and interdependence. However, guanxi networks may preclude cooperation and coordination across networks even if such cooperation would be mutually beneficial for all parties (Earley 1997). Individuals from a networked organization are characterized by several traits: extroverted and motivated by relationships; possess good social skills and empathy; tolerant of ambiguity; friendly and likeable with loyalty to their friends; patience; and prepared to build long-term relationships.

Goffee and Jones argue that networked organizations often suffer from excessive politics. To some extent, this may be inevitable since sociability tends to be sustained by face-to-face relationships, and there are limits to the number of people that any one person can know. Informal information exchange can easily become disruptive gossip, and members in networked organizations often engage in political game playing, impression management, and so on.

The final form of organizational culture addressed in Goffee and Jones's framework is the communal form. Although it is possible for corporations to survive and prosper lacking either sociability or solidarity, it seems intuitively appealing that an organization having high levels of both factors is an ideal one. High solidarity means that members within the organization are goal and performance focused with a strong sense of organization welfare. High sociability means that members are interpersonally attracted to one another, share information, help one another, and so on. Thus, the combination of both factors seems ideal. However, there is good reason to argue that a communal arrangement is ideal but inherently unstable. Imagine an organization experiencing a communal atmosphere. Individuals are productive, the organization achieves its goals, and people like working at the company. What might happen over time? As friendships and networks solidify there seems a likely shift toward a networked context in which organization members protect and cover for one another. This tendency reinforces an in-group versus out-group mentality with underperformers being protected by their particular in-group. However, as more productive out-group members see particularism exercised in protecting particular individuals, they may attempt to "give justice" by sanctioning the weak member. The result of this is a stronger polarization of in-group from out-group since the effect of an external threat to an in-group will solidify its sense of self. This means that the in-group will seek to support and protect the weak member further and perhaps lash out against the out-group. Very quickly, a positive feedback loop from this protection–sanction–protection–counterattack degrades the existing environment into one of high sociability, political infighting, and so on, and a reduction of productivity.

Even within an in-group we may see a disruption over time of the communal environment. In such a circumstance, as a member of my group I may be offended if you come to me and claim that I am not fulfilling my obligations. Rather than responding by attempting to work harder or more effectively, I instead use political connections or subterfuge to lash back at you. This cycle results in a very antagonistic atmosphere within our in-group leading to its dissolution.

A communal organization has much appeal. At some point, organizations with communal cultures become somewhat cultlike. Members tend to be passionate about their organization and so are able to expend high levels of energy over long time periods in supporting it. Communal cultures can often sustain complex teams apparently divided by geography, nationality, and function, for example, but united in a common purpose and close ties between espoused values and embedded practices. Individuals who fit best in communal cultures exhibit the following traits: idealist and obsessive; prepared to make sacrifices for the greater good; attracted to teams; able to fully identify and commit themselves to their organization; and place their organization above all others.

The Goffee and Jones framework is a very useful one for understanding how organizational diversity and CQ interact. The organizational culture that is in place constitutes an important backdrop for a person to understand if he or she is to adjust adequately. Just as we discussed with societal culture, the local atmosphere or culture within an organization places a large burden on an individual as he or she attempts to work successfully within a new organization. Imagine, as an example, a person whose former employer placed a great deal of emphasis on performance and accomplishment but had little regard for friendliness and socializing—that is, a mercenary environment. What happens if this person joins a highly networked organization? Upon assuming his or her new job responsibilities, he or she very quickly immerses him- or herself in the organization's goals and direction with a strong desire to "get ahead" quickly. This type of person is often referred to as a rate-buster and often experiences a strong backlash by coworkers who resent his or her high performance. A person with high CQ enters into a new work culture and focuses on determining the dominant practices of the organization as well as those relevant to his or her local circumstance. In a networked culture, he or she realizes that he or she must spend a significant amount of effort at socializing and getting to know new colleagues. Further, it is not merely sufficient for him or her to be productive since members in a networked organization will shun him or her unless he or she is "one of the gang."

For the low CQ person, it seems likely that the organizational culture may be largely misunderstood. Without a metacognitive framework for understanding how organizational cultures may vary, a low CQ person may assume that the cliquish atmosphere of the networked organization (perhaps with little attention paid to the new person) reflects his or her prior work environment in which people avoided social engagements and focused on their work. He or she is unable to discern a low level of engagement as reflecting a work emphasis versus an in-group emphasis. The Goffee and Jones framework is a very useful one since it provides one such metacognitive frame—their work reflects their own strong CQ by developing this metacultural frame for understanding organization dynamics.

Another way of viewing diversity in organizations and CQ is to describe various structural aspects of an organization. A person with high CQ must not only be able to ascertain an organization's cultural environment, but he or she must be able to understand its underlying structure, rules, and practices. By using an institutional analysis, it becomes apparent how CQ must operate if someone is going to be successful moving beyond understanding an organization's culture. That is, knowledge of an organization's institutionalized practices and structure is very important in understanding the role of CQ dynamics in an organization.

In its simplest form, Institutional Theory applied to organizations can be thought of as the study of functioning through an analysis of persistent rules and procedures underlying action. Organizations are viewed as dependent on a wide environment that is the product of rational and nonrational impulses and "less as a coherent rational superactor (for example, a tightly integrated state or a highly coordinated invisible hand) than as an evolving set of rationalized patterns, models, or cultural schemes. . . . These may be built into the public polity, in the laws, or into modernized society through professional and scientific analyses or the models set by exemplary organizations" (Scott and Meyer 1994, 33). Scott and Meyer (1994) present a useful overview of a prototypic, institutional model consisting of several elements. First, the origins of environmental rationalization reflect influences on the nature of organizing. Second, these origins give rise to particular dimensions of a rationalized environment such that rules or ideologies describing or prescribing given organizational practices create consistent changes in, and across, organizations. Third, these general rules and ideologies give rise to the specific mechanisms that shape organizational functioning. That is, organizations develop and perpetuate policies and rules, ideas and beliefs, myths and rituals in the organizational identities taken on. Finally, the specific nature of a given organization with its peculiar identity and activity patterns exists as a product of institutional forces.

Institutionalism includes a number of features. For example, there is an emphasis on norms and values in shaping individuals' behavior and actions in an organization. Organizational actors are influenced by the basic values endorsed in a given organization and through socialization values are instilled in an employee. According to Powell and DiMaggio (1991, 12–14), rational interests and purpose of an organization are changed through politics and conflict arising from individuals' self-interests. Organizations create informal structures based on powerful cliques and coalitions that form. These structures detract from the efficient functioning of the organization. In more recent developments of institutionalism (Powell and Smith-Doerr 1994), these emergent informal structures are the heart of formal structure. Organizational influences diffuse certain departments and operating procedures throughout a given organization through processes of isomorphism. (Isomorphism occurs through a number of mechanisms including coercive [conformity based on cultural and external influence], mimetic [conformity as a function of environmental uncertainty], and normative [conformity based on professionalism].)

Institutionalism emphasizes nonlocal environments such as organizational fields tied to industries, professions, or national societies as influences on existing practices within an organization. Environments are subtle in their influence on organizations in that they penetrate them through their shaping of actors' perceptions and worldviews. Some institutionalists downplay the centrality of individual actors in shaping an organizational setting despite this embeddedness argument.

One of the most important differences and evolutions of Institutional Theory from the perspective of CQ and social interaction can be traced to the operation of action in an organizational context. Individual action is largely based on the norms and values instilled in an organizational member as reflected in his or her commitment. People behave so as to receive gratifications reflecting the dominant norms and values in their work organization. The integration of values within a given collective occurs as an emerging role-set based on the prevailing cultural patterns sanctioned within a given society. Culture is composed of three elements that serve as a basis for object gratification and attraction; behavior is a rational process of gratification pursuit.

Garfinkel (1967) suggested that social roles and people's actions are products of complex, symbolic processes encountered through daily, mundane experiences. People make sense of their social world by employing tacit models of conversation and interaction through their everyday experiences. People enter into conversations with an openness and willingness to overlook the threats to self created by others. Rules and norms for social interaction operate, and people are motivated to support and endorse these expectations so long as clear violations are avoided, or treated apologetically if they are created. Garfinkel (1967) argued that most of the rules governing social actions are implicit and subtle, so one only becomes aware of them if they are breached during the course of social interaction. A very important point to Garfinkel's work is that norms are not the pervasive and direct influencer of action. Rather, norms guide cognitive systems, rules of procedures that people use in their interactions, and are often unconscious to a person.

As can be seen from this description, Institutional Theory characterizes social interaction and behavior as a product of institutional norms and rules evolving from various influences. Forces of various types create an impetus for demands and patterns of action in organizations that may or may not reflect true efficiencies in an economic sense. Further, these patterns (rules) influence the behavior of organizational members as they interact with one another. It reflects a set of mechanisms through which people's actions are guided and shaped. More importantly, Institutional Theory can be used to describe the influence of cultural context and social exchange practices of interpersonal regulation.

The impact of institutional effects on CQ can be mapped from two general directions, namely, those occurring within a given organizational environment and those impacted from outside the organization. The rules for social interaction, expectations for behavior, and interpersonal relationships are best thought as rituals, ceremonies, and so on emergent from institutional forces (Powell and DiMaggio 1991). Although there has been a clear increase in interest expressed by institutionalists concerning the significance of individual-level actions in organizations (Powell and DiMaggio 1991, 13), most attention has been to reject the additive role of individual actors in favor of collective behavior (Meyer and Rowan 1977).

However, the legitimization of particular practices within organizations is tied to the perceptions of individual actors within those organizations.

The importance of an individual actor to the nature of institutions is one of cause as well as effect (Scott 1994). The case of actor as effect is the most straightforward in terms of CQ. That is, institutional influences on an organizational member occur through a number of mechanisms, including socialization, identity formation, and sanctions according to Scott. Socialization reflects the most direct means through which organizational members are taught the "practices" and "rules" of an institution. Also, sanctions shape the actions taken by employees and help us understand the actions taken over a period of time. In describing the reciprocal effects of individual actors on emergent institutions, Scott argues that through interpretation and innovation institutional practices are shaped. These impact employees, in turn, through socialization, identity formation, and sanctions. A critical aspect of Scott's view is that through enactment an institutional context is shaped and reshaped. It is through daily actions and activities that the context in which behavior is embedded and interpreted is changed. In this manner, individual actions give rise to collective practices and rituals.

We do not argue, however, that employees are fully rational in their behavioral choices, and many of the specific behaviors displayed in an institutional context are scripted and schema-based reflecting existing rituals and norms. Although an institutional perspective posits that much of what goes on in an organization is best thought of as a murky and unconscious set of symbolic rituals and ceremonies, there are clear and predictable patterns related to organization structure and culture as well.

Obviously, our discussion suggests at least one metacognitive model concerning the various influences of an organization on its members. Essentially, Scott's variation on Institutional Theory represents one model of how an organization and its member interact and create meaning. Cultural intelligence from this perspective refers to a person's capability of determining how an organization functions and its impact on various people working within it. In a sense, the various levels build on one another with the individual-level feeding into the team-level feeding into the organization-level. Thus, it is most appropriate to talk about the three levels as they mutually interact as depicted in a framework such as Goffee and Jones or Scott present.

## CONNECTING CULTURAL INTELLIGENCE TO VARIOUS LEVELS OF DIVERSITY

We can think of cultural intelligence as operating within a diversity context having at least three layers—individual, team, and organization. To integrate these three, we look at a synthesis of the Goffee and Jones culture framework with Scott's structural model. In essence, the Goffee and Jones framework provides a specific content to the process and structural frame of Scott. Imagine a situation in which a new person enters an organization. He or she brings various experiences and preconceptions that are shaped by the new organization through socialization. Further, he or she impacts the organization to some extent although this might be rather modest. He or she will find him- or herself as part of a work unit and perhaps a team within a unit. From an individual perspective, this newcomer will be motivated to maintain and present a strong "face" or self-presentation for others. Clearly, making a good impression on others is a central feature of these early encounters for the newcomer. A desire to establish and maintain face requires that a person understand what constitutes status and position within the new company. This necessitates that the newcomer is able to observe others and ascertain the relevant characteristics for status. Further, it requires that the newcomer determine some way to solidify his or her own talents as central to the organization if he or she lacks other characteristics already valued in the organization. For example, if a person is very good at dealing with interpersonal issues but enters an organization that emphasizes numbers and analysis, he or she may need to work proactively to refocus people's attention on people-oriented contributions if he or she is to be a high-status member of the organization. In this sense, we see the up- and downward influence of the individual actor that Scott described in his institutional model.

The primary difference between a low and high CQ person in this example has to do with a degree of proactive engagement and effective influence. A low CQ person may lack the motivation to attempt change (or persevere when initially shunted) or the cognitive capacity to create a new mental model of the organization. Instead, he or she will apply a preexisting model for an organization, perhaps with very disastrous results. Additionally, he or she may not be able to generate the desired behaviors to adapt and fit in with the existing organization culture. Most importantly, a low CQ person is unable to distinguish what motivates others within the organization and the locus of such motivation. Is a fellow worker behaving because of personal background? Team norms and goals? Organization culture?

A person having high CQ is able to distinguish among these various levels and types of diversity (individual, team, organization) as well as create new metacognitive models to deal with the organization. For example, in this new organization, it might be that teams are very powerful subgroups within the company and the primary source of identity (much like Goffee and Jones's example of the networked organization). Within these teams people may possess comparable status with a great deal of flexibility for actions or they might be hierarchically structured. A high CQ person is able to address these issues through an adaptation of an existing cognitive frame or to create a new one appropriate for the new circumstance. Further, motivation plays a very important role in high CQ since it is likely that the cognitive models developed and implemented may well be in need of further refinement as new experiences are gained. It is one thing to enter into a new situation knowing that one must work hard to understand the setting; it is a different strength to have the resolve to abandon a framework that is not useful for understanding a situation but nevertheless came after much effort.

## SUMMARY

At an individual level, diversity reflects that unique and idiosyncratic aspects of people including background, inherited traits, acquired skills and knowledge, and unique experience. Cultural intelligence plays an important role for helping people understand one another and separating individual differences from more general patterns of behavior across individuals. Further, several motives guide a person's self-concept as a way of understanding the type of mental representations that a high CQ person must make to be an accurate observer and interpreter of others' actions.

In considering diversity from a team perspective, the role identities that people draw from as they interact with other people on their team are critical for understanding their actions. A person's CQ relates to a capability to infer a person's trait hierarchy and to act accordingly. Although a level of metacognition needed for cross-national and cross-societal interactions is not as high, intranational diversity may require additional metacognitive processing for imperfectly shared meanings across individuals. Further, the complexity of team interactions makes it difficult for a person to appreciate fully the group dynamics that might be observed.

Finally, diversity is a function of organizational culture and structure, as exhibited in Goffee and Jones's and Scott's models. A person with high CQ has a greater capability to operate within a wide variety of organizational cultures (flexible and adaptive) as well as understand how it might impact members' perceptions and interactions.

What should be clear from our discussion is that the capabilities afforded an individual having high CQ are useful for both international and intranational settings. In the case of intranational diversity, much of the cognitive activity and understanding will occur at a proximate rather than metalevel. Similarly, the behavioral component will likely occur in a more habitual fashion since much of a person's behavioral repertoire will be held in common with other societal members even if they come from diverse backgrounds. Motivation and a willingness to persevere are arguably the same as for the international context. However, it might be argued that a person who crosses international boundaries and who is less persistent in motivation, may face more rejection than in an intranational, and diverse, context. This difference would be due to a person assuming that within his or her own general culture he or she can figure things out or settle on some common ground, so efficacy is likely very high. Crossing a national boundary may lower these expectations a great deal, so persistence wanes as a person is confronted with his or her own mistakes.

Most importantly, cultural intelligence reflects a construct that is superordinate to emotional or social intelligence since it is not bound by a social setting that is held in common. Even within a culture, the subcultures that exist across diverse groups or organizations imply that existing cues for meaning may not be wholly meaningful. It is for this reason that we argue cultural intelligence is a superordinate construct to social and emotional intelligence. It provides for a level of metacognition that is not adequately recognized by existing social and emotional intelligence research.

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# TRAINING AND DEVELOPING CULTURAL INTELLIGENCE

*Joo-Seng Tan and Roy Yong-Joo Chua**

As it is with other forms of intelligence, a discussion about CQ is incomplete without due considerations on the nature versus nurture issue. While it is not our intention to examine this controversial topic at length, it is necessary for us to adopt a stance with regard to this issue. The question regarding the relative importance of one's biology or environment has been a highly controversial one since the turn of the twentieth century. Early intelligence theorists, such as Louis Terman (1877–1956), a professor of education and, later, the chair of the Psychology Department at Stanford University, and Henry Herbert Goddard (1866–1957), believed that intelligence was genetically transmitted. The same conception is also held by some prominent contemporary scholars, such as Christopher Brand (1996), Richard Herrnstein, and Charles Murray (1994), who believe that genes play an instrumental role in determining one's level of cognitive ability. Their views, represented through books linking IQ to race, were highly contentious. Recent studies by scientists at Princeton, M.I.T., and Washington University also supported the existence of strong links between genes and intelligence by suggesting that genetic enhancement of mental and cognitive attributes such as intelligence and memory in mammals is feasible (*Time* 1999). However, to date, there is still no convincing or conclusive evidence that genes are indeed the key determinants of human intelligence.

Nevertheless, it is widely acknowledged that environmental factors such as early childhood experience, education, and parenting play instrumental roles in shaping ones' personality, social skills, and even cognitive abilities. Today, many scientists and researchers prefer to subscribe to the more balanced view that intelligence is determined by an interaction between environmental and genetic factors. This is also our stance with regard to CQ.

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Examining the three key facets of CQ—cognition, motivation, and behavior—we argue that while genes may play a part in determining one's general intelligence, which may in turn affect one's CQ level, there is much room for environmental intervention. Several key features of cognition in relation to CQ are metacognition, declarative and procedural knowledge, reasoning (both inductive and analogical), and social perception. It is obvious that areas such as declarative and procedural knowledge can be learned. For instance, an expatriate posted to Japan can take courses or read books on the host-country's culture. Through such intervention, he or she can pick up declarative knowledge such as the meaning of customary gestures (for example, bowing) and procedural knowledge (for example, how to go about conducting a meeting in corporate Japan). Likewise, reasoning and social perception skills can be acquired through appropriate training programs. In their review of the literature on cross-cultural training, Black and Mendenhall (1990) argued that cross-cultural training in general can be effective in enhancing cross-cultural interactions. Their review suggested that cross-cultural training has a positive impact on an individual's development of skills, cross-cultural adjustment, and job performance. Subsequently, they argued that the Social Learning Theory (Bandura 1977) can be used as a framework for understanding cross-cultural learning and training. According to Black and Mendendall, "Social Learning Theory not only integrates cognitive and behavioral aspects . . . it also encompasses the motivational aspects within the concept of self-efficacy, and it covers the issues of how individuals both learn and utilize what they learn during a training situation" (1990, 121).

There are essentially three key dimensions through which cross-cultural training can be achieved within the theoretical framework of Social Learning Theory. The "self" dimension focuses on increasing trainees' self-confidence and their ability to act effectively in a cross-cultural setting. This is in line with our argument that self-efficacy is an important aspect of the motivational facet of CQ. The "relationship" dimension deals with the increasing trainees' relational skills. Such skills are important because when trainees actually confront a foreign culture, they have to recall the information and behavioral repertoire they have learned so as to interact with members of this foreign culture. To do so would generate both internal and external feedback, which in turn helps trainees refine their cross-cultural skills. This suggests the importance of role-play, simulation, and experiential learning in CQ training. Finally, the "perception" dimension of cross-cultural training serves to provide trainees with information on the worldview and cognitive tendencies of members of other cultures. This helps the trainee make the appropriate association between the behavior and cognitive maps by individual from a foreign culture, thereby building greater tolerance toward ambiguity or reserving judgments about the actions or behavior of people of other cultures.

In addition to these three dimensions of cross-cultural training, Black and Mendenhall argued that Social Learning Theory can also be applied to cross-cultural adjustment. To them, adjustment is most relevant when an individual has to live in a foreign culture for a substantial period of time, and cross-cultural adjustment involves the knowledge of which behavior to execute or suppress in given situations. The emphasis is on knowing what one knows, as well as the when and how of applying this knowledge. Incidentally, this coincides with our argument previously that metacognition plays an important role in CQ.

## A REVIEW OF CROSS-CULTURAL TRAINING APPROACHES, PROGRAMS, AND METHODS

### Dualistic Approaches to Cross-Cultural Training

"Informed and intelligent action," philosopher John Dewey once wrote, is "the aim of all educational development" (1935, 605). For Dewey, the flaw in most educational theories of the day could be found in the dualistic separation of mind and body. Dewey's seminal work on educational philosophy, particularly his emphasis on activity as an important educational principle, was a key influence on organizational training programs. But much of the cross-cultural training that occurs today continues to maintain the separation between thought and action that Dewey attempted to bridge in the early twentieth century. Some practitioners and consultants in cross-cultural training have even argued that cross-cultural training should move from the cognitive to the behavioral (Foster 2000). Consistent with the conceptual framework presented in this book, the philosophy that undergirds the training framework in this chapter has an integrative motive and propensity similar to Dewey's educational philosophy, that is, it seeks to integrate the cognitive, the motivational, as well as the behavioral components of training and developing cultural intelligence.

Consider the two extremes of cross-cultural training that take place in many organizations today: (1) the "sponge" training method, which focuses on "thought"—a classroom or self-study method, in which executives and managers absorb or acquire cultural knowledge and facts by attending lectures, briefings, and information sessions on new cultures; and (2) the "hands-on" training method, which focuses on “action”—either an experiential or simulated method or on-the-job training (OJT), in which executives and managers learn how to display culturally appropriate behaviors via role-plays, simulations, or “shadowing” representatives from the new cultures (by following the behaviors displayed by the representatives). The skills that result from the “sponge” training method may be narrow and difficult to retain. The “sponge” training method does not necessarily produce culturally intelligent workers who are motivated to behave in culturally appropriate ways and to enact culturally appropriate behaviors (Dewey’s emphasis on “*intelligent*” action). Nevertheless, the skills that result from the “hands-on” training method do not necessarily produce culturally intelligent workers who can understand and explain lucidly the rationale and motivation behind the cultural behavior (Dewey’s emphasis on “*informed*” action).

At the heart of the training framework on cultural intelligence, we adopt the position that all three components that combine to define culturally intelligent individuals are amenable to training and development: (1) the ability to understand and make sense of cultural cues as well as to develop new cultural schemas (cognitive component); (2) the drive and the motivational force to adapt to the new cultural environment (motivational component); and (3) the ability to enact culturally appropriate behaviors (behavioral component). In line with traditional understanding of training, we also presume a high degree of intentionality on the part of management, that is, what they want executives and managers to be able to know and to do as a consequence of cross-cultural training.

Intentionality is a potent and necessary force in cross-cultural training, not only for the individual but also for the organization. Professional and personal goals in the context of the global economy can be successfully accomplished in cross-cultural training. Cross-cultural training in the globalized economy also means that organizations need to set new and higher standards of selection, assessment, training, and motivation of people (Bhagat and Prien 1996). As a result, cross-cultural training is fast becoming not only a significant but also a strategic component in the world of international business and management. There is increasing interest in the effective assessment and selection of people from different cultures. An increasing number of people will be required to work in an international environment, whether as expatriates, individuals, or teams on short-term assignments, or as regular-business travelers, or as people who need to work within a dominant national/corporate culture that is not their own. This is a consequence of the increased internationalization in the economic, political, and social arenas, which has led to greater interpersonal cross-cultural contact. Ever-growing numbers of people with international responsibilities and regular travel are increasing every year (Adler 1995; Goldstein and Smith 1999; Zakaria 1999).

The globalization of business, the search for the best international talent and the enormous cost of the investment decision represented by an international manager means that many international companies are looking for ways to maximize their chance of success. Expatriation is extremely costly: there are both the actual costs of relocating and training the selected executives, and the hidden costs of orchestrating a host of factors to ensure success. Some studies have reported a failure rate as high as between 25 and 40 percent in developed countries and as high as 70 percent in developing countries (Buckley and Brooke 1992). Although recent studies by Harzing (1995) and Forster (1997) have attempted to "demolish the persistent myth of high expatriate failure rates," failure rates do exist, and companies are keen to reduce failure rates. Thus, more and more companies are investing in better selection and training programs. Cross-cultural training has been proposed by many scholars as a means of facilitating more effective interaction and cultural adjustment for both the sojourner and the expatriate.

Many researchers have focused their attention on examining the effectiveness of cross-cultural training and the outcomes of cross-cultural training (for example, Goldstein 1994; Harrison 1992; Kealey and Protheroe 1996; Triandis 1977; Zakaria 1999). Cross-cultural training has long been advocated as a means of facilitating effective cross-cultural interaction and adjustment (Bochner 1982; Harris and Moran 1979; Landis and Brislin 1983; Mendenhall and Oddou 1985; Tung 1981b). A literature review by Black and Mendenhall (1990) found strong evidence for a positive relationship between cross-cultural training and adjustment. In a recent study, Goldstein and Smith (1999) found that student sojourners who attended an experiential cross-cultural training exhibited greater cross-cultural adaptability than a similar group of students who did not attend the training.

The merits of using cross-cultural training as a way of increasing effectiveness in areas such as expatriate assignments or international negotiations have been well established (for example, Black and Mendenhall 1990; Tung 1987). Cross-cultural training is the key to expatriate success (Ashamalla and Crocitto 1997; Hogan and Goodson 1990). Cross-cultural training enables the individual to anticipate necessary emotional adjustments, increase cultural sensitivity, and gain the knowledge and skills necessary for interacting effectively with people from different cultures (Albert 1994; Bochner 1982). In the field of cross-cultural training, practitioners have attempted to codify cross-cultural training into specific events and manuals to ensure effective training.

Cross-cultural training events and manuals were first commissioned by the U.S. government. Today the U.S. government continues to be a major purchaser of such knowledge. Historically, if we trace the evolution of cross-cultural training, we find that the demand for cross-cultural knowledge began in the 1960s after the first Peace Corps. volunteers (PCVs) were sent abroad (Barnes 1985). The failures of these PCVs created a demand for information and skills regarding the implicit assumptions, enacted values, habits of thought, and patterns of behavior of the peoples with whom the PCVs were working. This coincided with the nascent research in intercultural issues in the 1950s, which was heralded by the publication of two classics, Gordon Allport's *The Nature of Prejudice* (1954) and Edward T. Hall's *The Silent Language* (1959), which described human differences in nonverbal behavior.

## Cross-Cultural Competencies

Cultural competence can generally be defined as the process by which individuals and systems respond effectively to people of all cultures, languages, classes, races, ethnic backgrounds, religions, and other diversity factors in a manner that recognizes, affirms, and values the worth of individuals, families, and communities and that protects and preserves the dignity of each. Thus, cultural competence can be viewed as a set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals and enable the system, agency, or professionals to work effectively in cross-cultural situations.

Operationally defined, *cultural competence* is the integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services, thereby producing better outcomes (Davis and Donald 1997). Competence in cross-cultural functioning means learning new patterns of behavior and effectively applying them in appropriate settings. This kind of sophisticated cultural competence does not come naturally and requires a high level of professionalism and knowledge. Cultural competence is also not static and requires frequent relearning and unlearning about cultural diversity.

The personal attributes of culturally competent individuals include qualities that reflect genuineness, empathy, and warmth; the capacity to respond flexibly to a range of possible solutions; an acceptance of and openness to differences among people; a willingness to learn to work with people of different cultural backgrounds; and an articulation and clarification of stereotypes and biases and how these may accommodate or conflict with the needs of culturally diverse groups.

Cultural, cross-cultural, or intercultural competencies are increasingly being viewed as indispensable by globalizing businesses, diplomatic corps, educational institutions, military services, people-to-people exchange groups, missionary societies, nongovernmental organizations (NGOs), and many other organizations with international scopes of activity (for example, United Nations, World Trade

Organization, European Union, APEC, and so on). An inventory of cross-cultural competencies has been identified by researchers, practitioners, and consulting firms that specialize in cross-cultural training:

- Communication skills (Beamer 1992; Gudykunst 1993; Hamilton 1993; Kim 2001; Ting-Toomey 1999; Wiseman and Koester 1993)
- Tolerance for ambiguity (Hannigan 1990; Pedersen 1988; Taylor 1994)
- Empathy (Hannigan 1990)
- Open-mindedness (Church 1982)
- Flexibility (Ptak, Cooper, and Brislin 1995)
- Ability to adopt a dual focus: focus on both task and relationship (Tung 1987)
- Positive attitude to learning (Taylor 1994)
- Tolerance for different styles and cultures (Christopher 1988)
- Cultural knowledge (Harris and Moran 1979; Stening and Hammer 1992)
- Ability to succeed in multiple and diverse environments (Tung 1981, 1987)

Based on this list of cross-cultural competencies, two important observations can be made. First, the list covers knowledge (for example, cultural knowledge), skills (for example, communication skills), abilities (for example, ability to succeed in multiple and diverse environments), as well as dispositional traits (for example, empathy and open-mindedness). Second, there is a common assumption of "the more of these, the better." But some practitioners hold the view that in operating across cultures, the valuable skills are in balancing and reconciling competencies, not in having extremely large amounts of one or the other. It is clear in operating internationally, for instance, that flexibility is good—but if all one does is to be flexible, how does one know where to draw the line, for example where ethical standards differ across cultures. It seems, therefore, that it would be more useful that training in cultural intelligence should produce individuals who understand when it is culturally appropriate in that culture to be flexible, and when not to be.

When we reviewed the extant literature on cross-cultural competencies (for example, Black and Mendenhall 1990, 1991; Deshpande and Viswesvaran 1992; Gersten 1990; Leiba-O'Sullivan 1999; Taylor 1994), we discovered that these competencies were conceptually fuzzy and not well-defined, because they were conflated with dispositional traits such as empathy and open-mindedness. For instance, in a recent study by Leiba-O'Sullivan (1999), the study conceptualized cross-cultural competencies within Black and Mendenhall's (1990) three-dimensional taxonomy of cross-cultural competencies: the self-maintenance dimension, the relationship dimension, and the perceptual dimension. In distinguishing cross-cultural competencies as “stable” and “dynamic,” Leiba-O’Sullivan’s (1999) study focused on the Big Five (NEO-PI) (Costa and McCrae 1992) dispositional traits such as emotional stability, extraversion, agreeableness, openness to experience, and conscientiousness. Although Leiba-O’Sullivan’s (1999) study is an attempt to provide greater conceptual clarity on cross-cultural competencies, we argue that the inclusion of dispositional traits obfuscates the conceptualization of cross-cultural competencies. Our main contention is that dispositional traits are relatively stable and therefore less amenable to training.

In general, this conceptual fuzziness of cross-cultural competencies has bedeviled cross-cultural training programs. If cross-cultural competencies are not well-defined, then it is immensely difficult for individuals to acquire the specific competencies necessary to become culturally intelligent. Cross-cultural training programs would be less efficacious in producing culturally intelligent individuals. Thus, we seek to make an important distinction in clarifying and identifying the specific cross-cultural competencies for cultural intelligence training. We adopt the stance that cross-cultural competencies do not include dispositional traits, which we assume to be nontrainable. We distinguish between competencies that are predisposed to cultural training (trainable) and competencies that reflect personality (nontrainable). We focus our attention only on trainable competencies.

## Cross-Cultural Training Programs

Our review of the literature in cross-cultural training and consulting showed that cross-cultural training programs are bifurcated in terms of the training objectives. First, cross-cultural training programs, sometimes also called intercultural management training and consulting, aim at the delivery of skills that enable people to quickly become professionally productive and interpersonally effective when working on assignment abroad, or when working anywhere with others from an unfamiliar culture. Examples include global management training, virtual team facilitation, international merger and acquisition integration, cross-cultural project management training, and executive coaching.

Second, cross-cultural training programs, sometimes also called international assignment training services, aim at the delivery of services in support of international assignees or expatriates and their family members, including outbound, inbound, and homebound expatriates. Relocation assistance, visa preparation, tax planning, language training, household-goods transfer, and cross-cultural coaching are among these services.

We focus on the first type of cross-cultural training programs. The emphasis is on training individuals to become culturally effective when working, studying, or living in a new cultural environment. In our training framework on cultural intelligence, we do not include individuals who already possess cultural knowledge as a result of enculturation (that is, born and raised as members of the cultural group in question), or acculturation (that is, immersed full time and over a long period of time within the cultural group in question). In fact, in cross-cultural training programs, individuals who have been enculturated or acculturated in the target culture are most ideally involved as training designers, trainers, or resource people. We believe such enculturated or acculturated individuals have different training needs that fall outside the scope of our training framework on cultural intelligence.

## Types of Cultural Knowledge and Training Outcomes

In reviewing the literature on cross-cultural training, we find that training methods principally address three types of knowledge: (1) *cognitive* knowledge answering "what" questions about that culture (this is *explicit* knowledge about a wide range of facts about the new culture); (2) *behavioral* knowledge answering "how" questions about behavior in that culture (this is *implicit* knowledge about appropriate behaviors in the new culture; "how" issues constitute the first of two principal emphases in cross-cultural training, leading to a focus on learning to skillfully enact certain behaviors); and (3) *affective* knowledge answering "why" questions about behavior in that culture (this is intuitive understanding of the motives for the appropriate behaviors in the new culture; "why" issues constitute the second of two principal emphases characteristic of cross-cultural training, leading to a focus on learning to develop an empathetic sensitivity to, and understanding of, unfamiliar behavior and values).

It is not surprising to find that the literature on cross-cultural training programs shows a strong relationship between training outcomes and types of cultural knowledge. Brislin and Hovarth (1997) in their comprehensive review of cross-cultural training programs provide a tripartite classification (see Table 10.1).

In order to train culturally intelligent individuals, it is imperative that cross-cultural training programs address the twin issues of "informed action" and "intelligent action" expressed by Dewey. Cross-cultural training programs have always emphasized the changes in thinking, that is, creating and increasing cultural awareness and developing cultural sensitivity (Brislin, Landis, and Brandt 1983; Hall and Hall 1990; Mendenhall and Oddou 1985). However, cross-cultural training programs thus far have not emphasized the role of metacognition, motiva-

**Table 10.1**
Training Outcomes and Types of Cultural Knowledge

| *Changes in Thinking (Cognitive Knowledge)* | *Changes in Affective Reactions (Affective Knowledge)* | *Changes in Behavior (Behavioral Knowledge)* |
|---|---|---|
| Essentially involves increasing people's knowledge of culture, cultural differences and issues confronted in cross-cultural settings.<br>With successful training in this area, people can increase the complexity of their thinking, take multiple viewpoints into account, etc. | As people can develop negative views of other cultures due to various reasons such as personal prejudices or unpleasant past experiences, this category of training strives to help people manage their affective reactions.<br>Part of such training is to address "culture shock" (Furnham and Bochner 1986) | This category of training focuses on helping people change their outward behavior. |

tional training, and the importance of behavioral changes. In our new cultural intelligence training framework, we focus our attention on training metacognition, motivation, and behavior.

### *Cross-Cultural Training Methods*

Training in general can be defined as any intervention aimed at increasing the knowledge or skills of the individual. Kealey and Protheroe defined training as "any intervention aimed at increasing the knowledge and skills of individuals, so as to help them cope better personally, work more effectively with others, and perform better professionally" (1996, 145). In general, cross-cultural training may be defined as any procedure used to increase an individual's ability to cope with and work in a foreign environment (Tung 1981a). There are many types of trainings that can be given to people to be sent abroad, depending on their objectives, the nature of their responsibilities and duties, the length of their stay, and their past experiences (Zakaria 1999). The effectiveness of various types of training will depend on the time and resources available for undertaking them, the quality of trainers, and the possibilities for in-country training (Kealey and Protheroe 1996). Training can involve many techniques and methods, ranging from the experiential (for example, role-playing) to the documentary (for example, reading literature) (Earley 1987; Shear 1993). Some of the types of cross-cultural training available are practical information, area studies, cultural awareness, intercultural effectiveness skills, and interpersonal sensitivity training (Kealey and Protheroe 1996). For a detailed review of these types of cross-cultural training, readers are referred to Kealey and Protheroe (1996).

Brislin and Hovarth (1997) provide a comprehensive review of cross-cultural training methods in their evaluation of cross-cultural training (see also Fowler and Mumford 1995, 1998). In their review, they categorized five approaches in cross-cultural training: (1) cognitive; (2) attributional; (3) experiential; (4) self-awareness; and (5) behavioral. In general, there has been a lot of emphasis on cognitive and attributional training, and some emphasis on experiential approaches in cross-cultural training. However, there has been scant or no mention of motivational and metacognitive training.

In cognitive training, which is mainly concerned with the transfer of cultural knowledge or basic information, the techniques include the use of short lectures, films, videos, reading materials, and case studies (Black and Mendenhall 1990; Deshpande and Viswesvaren 1992; Kealey and Protheroe 1996). As evident from the techniques described, cognitive training is perhaps the easiest to plan and to administer. Cognitive training is also relatively cheap compared to other forms of cross-cultural training. However, cognitive training of this kind is ineffective because it does not produce culturally intelligent individuals with high-level metacognitive competencies who are behaviorally effective in diverse cultures. Tung (1981a) suggested that purely informational briefing on the host-country was not sufficient to increase sojourners' interpersonal and professional effectiveness overseas. No matter how detailed the cultural information, it would be virtually impossible to know everything about a culture (unless one is sufficiently enculturated or acculturated in that culture over a long period of time). We address this concern in our training framework.

In attributional training, the emphasis is on cultural relativity. This method of training is based on the differing interpretations of critical incidents involving interactions among people from different cultural backgrounds. The usual technique is culture assimilators, which are essentially a set of social situations that can lead to misunderstanding among people from different cultural backgrounds. Participants typically gather in a focus group to discuss their own interpretation of the situation and provide their recommendation. This method is useful because it does provide basic cultural scripts about specific cultures that cover a wide variety of social situations. Culturally appropriate behaviors are clearly identified. The drawback is that most culture assimilators are culture-specific, and this kind of training is typically more time-consuming for participants.

A number of studies have been conducted by cross-cultural researchers on the use and effectiveness of culture assimilators (Albert 1980, 1983; Brislin 1986; Fowler and Mumford 1995, 1998; Malpass and Salancik 1977; Weldon et al. 1975). However, Kealey and Protheroe argued that in most of these studies the results of the effectiveness of such cross-cultural training are "deficient" as "the empirical or experimental grounding remains seriously wanting" (1996, 161). What most of the studies have confirmed so far is that cross-cultural training does produce immediate learning results. Further research is needed to show the long-term results and substantive changes in the social and professional behavior of sojourners.

In experiential training, the emphasis is on "hands-on" training. Techniques used include role-plays, field trips, and simulations. Participants are more emotionally engaged in this kind of training as they get to "sample" or experience the "real" culture. Participants can be put in very lifelike social situations with representatives from other cultures. This kind of training can be emotionally demanding for both the participants and the trainers. In a recent study by Goldstein and Smith (1999), student sojourners who attended an experiential training program reported significantly higher scores on the Cross-Cultural Adaptability Inventory (CCAI) in every dimension of cross-cultural adaptability, including emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy, compared to a similar group that did not attend the training.

In self-awareness training, the emphasis is on dealing with the participants' awareness of their own culture and the typical reactions people have when their self-esteem is challenged in other cultures. The objective is to help participants become more aware of their own values, attitudes, and behaviors. The usual training methods are the culture-contrast techniques and role-plays. Trainers behave in ways that provide sharp contrasts with the preferred behavior of the participant (culture-contrast). Trainers then explain the rationale for their behavior from a cultural perspective. Participants' self-awareness of how they handle conflicting situations is heightened through this kind of training. As with the experiential training, self-awareness training can be emotionally demanding for both participants and trainers.

In behavioral training, the emphasis is on outward or observable behavior. Participants are given the opportunity to practice and display appropriate behaviors in various cultural settings and scenarios. Because this kind of training is more demanding for participants and it is more time-consuming, not many cross-cultural training programs emphasize it. We believe that behavioral training is critical in training culturally intelligent individuals. Later, we describe how behavioral training can be conducted through the use of performing and visual arts grounded within the dramaturgical framework.

In the literature on cross-cultural training, it is fairly well established that informational training and experiential training work best in tandem (Harrison 1992; Landis, Brisling, and Hulgus 1985). What this suggests is that effective cross-cultural training programs need to adopt a multifaceted and integrated approach. Different training methods have different costs and benefits. Developers of cross-cultural training programs need to be aware of this and design programs that produce the desired outcomes for the participants.

Recently, researchers have begun to study alternative instructional approaches to cross-cultural training (for example, Gannon and Poon 1997). In Gannon and Poon' s (1997) study, a combination of old and new instructional conditions was used: integrative, video, and experiential (BaFa BaFa) (for a detailed description of the BaFa BaFa simulation, the reader is referred to Shirts 1973). The quest for new instructional approaches to cross-cultural training is influenced by advances in research on instructional design (for example, Clark 1998).

### *A Framework for CQ Training*

Besides outlining the three key dimensions (self, relationship, and perception) through which cross-cultural training can be achieved within the theoretical framework of social learning theory, Black and Mendenhall also alluded to the importance of metacognition in cross-cultural adjustment. The training framework thus created by Black and Mendenhall captures most of the aspects of CQ presented in this book and is extremely relevant to what we are advocating here. However, we feel that the same elements and ideas can be better presented in a different way based on our proposed CQ model. There are several reasons for this.

First, the original training framework proposed by Black and Mendenhall does not clearly differentiate among the various facets of cultural intelligence. For example, the "relationship" dimension of cross-cultural training appears to encompass both cognitive and behavioral aspects of CQ besides emphasizing importance of the feedback mechanism and interaction involved in cross-cultural experiences. The cognitive and behavioral facets of CQ are different subconstructs and can be treated separately for better understanding. By organizing training methods based on our Cognition-Motivation-Behavior Model, one can better isolate the required area for improvement. For instance, some individuals could be very strong in the cognitive aspect as they have a great sense of self-awareness, good knowledge of various cultures, and strong metareasoning skills, but they could be weak in displaying the necessary overt behavior or actions required of them during a cross-cultural interaction. Training for these individuals should therefore focus on building up a strong set of behavior repertoire, rather than giving them the knowledge they already have. We believe that by organizing training methods around our Cognition-Motivation-Behavior Model, training can be more focused and therefore more effective.

Second, the Black and Mendenhall framework does not explicitly address the fact that not everyone needs the same level of CQ to survive in a given cross-cultural encounter. Here, we are taking a more practical approach toward training and development. We recognize that not everyone is going to engage in cross-cultural encounters involving the same duration or intensity, implying that training should be targeted toward the individual's needs. Tung (1982) and Mendenhall and colleagues (1987) argued that the degree to which cross-cultural training is needed and is effective depends on the degree to which the individual must interact with members of other cultures. Hence, we feel that in any useful CQ training framework, the training needs of an individual must be taken into consideration. This will be especially helpful for corporations that intend to prepare employees to meet different levels of cross-cultural challenges.

Current literature and cross-cultural training programs appear to be lacking in the motivational and metacognition aspect. By presenting a new training framework that explicitly acknowledges the presence of these two components, we can better address the training requirements for these areas. Our training framework for cultural intelligence is anchored in the three central facets of CQ as proposed in this book—cognition, motivation, and behavior. As such, we will be organizing the various training methods such that each targets one of these three aspects. Of course, we can expect some training approaches to address more than one of these three facets. For example, a training program using the cultural assimilator may involve increasing both self-awareness (cognition) and self-efficacy (motivation). In such cases, we acknowledge the comprehensiveness of such methods and present them accordingly. However, from our review of the existing training methods and literature, most training techniques tend to focus on one key facet of our CQ model. These three facets of CQ will therefore be the foundational layer in our CQ training framework.

The second layer of our framework pertains to training needs. Here, we delineate the training requirements for CQ into three levels based on the following criteria:

1. Intensity of interaction with members of other culture
2. Duration of interaction with members of other culture
3. Nature of interaction with members of other culture

*Intensity*, as the term implies, is characterized by the frequency of contact with one or more foreigner(s). For simplicity, we classify intensity as either high or low. For high intensity, a person may need to interact and socialize with one or more foreign individuals very frequently. For instance, if a student were to pursue his or her education in an overseas university, he or she will experience intense interaction with classmates and professors in the foreign country. By contrast, low-intensity contact is possible in situations such as a businessperson visiting his or her foreign subsidiary, which is mainly staffed by employees from his or her home country.

*Duration* refers to the length of time a person is in contact with a foreign culture. Obviously, if interaction or contact time is short, it may not be necessary to prepare a person extensively in terms of cross-cultural training. For extended interaction, such as expatriates being posted overseas for more than six months, substantial preparation in improving CQ is clearly required. Again for simplicity, we can classify duration as either long or short. A cross-cultural interaction of long duration is usually six months or more.

**Table 10.2**
Different Levels of CQ Training

| *CQ Training Level* | *Description* | *Training Needs* |
|---|---|---|
| Level 1 | Generally involves low intensity and low duration of interaction with members of other culture. | Training should involve building simple cognitive content, some simple behavior techniques and an adequate level of emotional preparation and self-awareness. |
| Level 2 | Generally involves low-intensity interaction but the duration is usually long. Interaction could also be formal. | Training should involve building substantial cognitive and meta-cognitive skills, a significant set of behavioral repertoire, and a high level of self awareness with a moderate level of self-confidence. Some goal setting skills may be helpful. |
| Level 3 | Tends to involve formal interaction of long duration and high intensity. | Training should involve building a high level of cognitive and meta-cognitive skills, a comprehensive set of behavioral repertoire or self-presentation ability, a high level of self-confidence and awareness. Significant goal setting may be required. |

**Table 10.3**
Detailed Structure of CQ Training Levels

| *Intensity of Interaction* | *Duration of Interaction* | *Nature of Interaction* | *CQ Level* | *Example* |
|---|---|---|---|---|
| High | High | Formal | Level 3 | Expatriate posted overseas / overseas education |
| | | Casual | Level 3 | Long duration stay in a foreign location for either personal or leisure purpose. People involved include backpacker, spouse of expatriates, etc. |
| | Low | Formal | Level 2 | Short but important business negotiation / overseas recruitment campaign |
| | | Casual | Level 2 | Short holiday trip with significant interaction with local. E.g., self-traveling |
| Low | High | Formal | Level 2 | Researcher collecting longitudinal data in relative isolation in a foreign country. |
| | | Casual | Level 2 | Spouse of expatriate who keep to own community more than totally integrating with the locals. |
| | Low | Formal | Level 1 | Simple business call over the phone / simple business correspondences with members of other culture. |
| | | Casual | Level 1 | Short holiday trip with little or no interaction with the locals. E.g., guided tour. |

*Nature* of interaction refers to the type of interaction that a person has with one or more members of another culture. Broadly speaking, such interaction can either be formal or casual. By formal interaction, we mean interaction that involves official work assigned by one's company or serious endeavors with important consequences. Examples include business negotiation and overseas education. Casual cross-cultural interaction tends to be of a less serious nature and usually does not involve significant consequences if not performed well. One good example is the overseas holiday. One may find oneself in an embarrassing situation if one did not handle a situation well in a foreign country. However, the effect very often is simply embarrassment. Compared to formal cross-cultural interaction, a slip could mean the loss of an important business deal or not doing well in school. By no means do we want to advocate that all cross-cultural experiences can be classified into either one of these two categories. We believe that many cross-cultural interactions actually fall in between these two ends. However, for simplicity of the framework and easier understanding, we shall stick to these two categories as we present our model.

Having outlined the three key criteria for different levels of CQ training, we propose a training structure for CQ based on the different levels of training needs (see Table 10.1). A more detailed breakdown of the different levels of CQ training and the associated situations is given in Tables 10.2 and 10.3. Once again, we would like to reiterate that although we have conveniently demarcated the three criteria of intensity, duration, and nature of cross-cultural interaction into dichotomous categories, it need not be so. The framework is presented such that it is useful as a guide to any training practitioner interested in formulating the appropriate level of CQ training for his or her trainees.

## Competence-Based Training for Cultural Intelligence

Our CQ training framework is not completed yet. In Table 10.1, we alluded to the different types of training needs for each level of CQ competency. This brings us to the issue of the competencies required for cultural intelligence. In discussing practical intelligence, Sternberg (1997, 2000a) and Wagner (1987) considered intelligence as a set of skills that can be acquired. For instance, practical problem-solving ability consists of skills such as being able to identify connections among ideas, interpret information accurately, and perceive implied assumptions and conclusions. By contrast, social competence involves thinking before speaking and doing, displaying interests in the world at large, and being sensitive to other people's needs and desires. Hence, to enhance one's practical intelligence, it is imperative to develop the associated skills. In recent years, the use of competencies has also proven to be a major growth area in management development. A growing number of companies have been looking to competence-based training as an approach to formulate their training strategies (Burgoyne 1993).

However, the competence-based training approach is not without its critics. For instance, Jubb and Robotham (1997) challenged many key aspects of this approach. Firstly, they argued that managerial competencies cannot be easily defined in the first place. What exactly are these competencies? Are they skills, traits, or behavior? Further, they argued that even if such competencies can be defined, there is the perennial problem of measurement difficulties. Finally, they also questioned the assumption that the practice of management can be broken down into its constituent elements to be addressed separately. In short, they felt that the validity of the approach has not been proven.

We acknowledge that these concerns are generally valid, but argue that in the context of training for CQ, the competence-based approach is still a useful one. There are several reasons why we say so. First, a set of competencies serve as a form of achievement objectives for the trainees. At the end of a course, these can also be used as evaluation criteria. Hence, trainees will able to see clear developmental goals in their training. Second, this approach gives organizations a framework to better focus their training resources. For example, if an employee is only going to travel to a foreign country for a short five–six-day business trip, there is really no need to prepare this employee to the highest CQ level. According to our model, a level-two training may suffice. Therefore, from a training perspective, the competence-based approach provides a useful and practical framework. Third, Jubb and Robotham's criticism toward the applicability of competence-based approach to managerial development may not be so acute in our case. This is because we are not dealing with a large set of managerial skills per se. Rather, ours is very focused and specific, that is, training for higher cultural intelligence. Since our main thesis is that CQ can be broken down into three central facets—cognition, motivation, and behavior—we also believe that each area can be targeted for training separately, even though some form of integration would probably be necessary for the trainee to utilize the various skills effectively in concert. Finally, since we are positing CQ as a form of intelligence, it is appropriate to consider it as a collection of associated competencies or skills as Sternberg and Wagner (2000) did, thereby greatly facilitating the process of developing the required training strategies.

By incorporating a competence-based approach, the overall framework for CQ training is depicted diagrammatically in Figure 10.1. For each facet of CQ, every level of training has its own set of required skills and training. Highlighted is the set of required competences and associated training for level-two CQ training for the motivational facet.

With the above framework, training practitioners can strive to cultivate greater CQ in their trainees by first identifying the level of CQ training required for individual trainees given the intensity, duration, and nature of cross-cultural interaction that he or she is expected to undergo. Next, the trainer will need to identify the gaps in training requirement. (Chapter 7 on assessment provides a good overview of the different ways of assessing one's cultural intelligence.) With these two

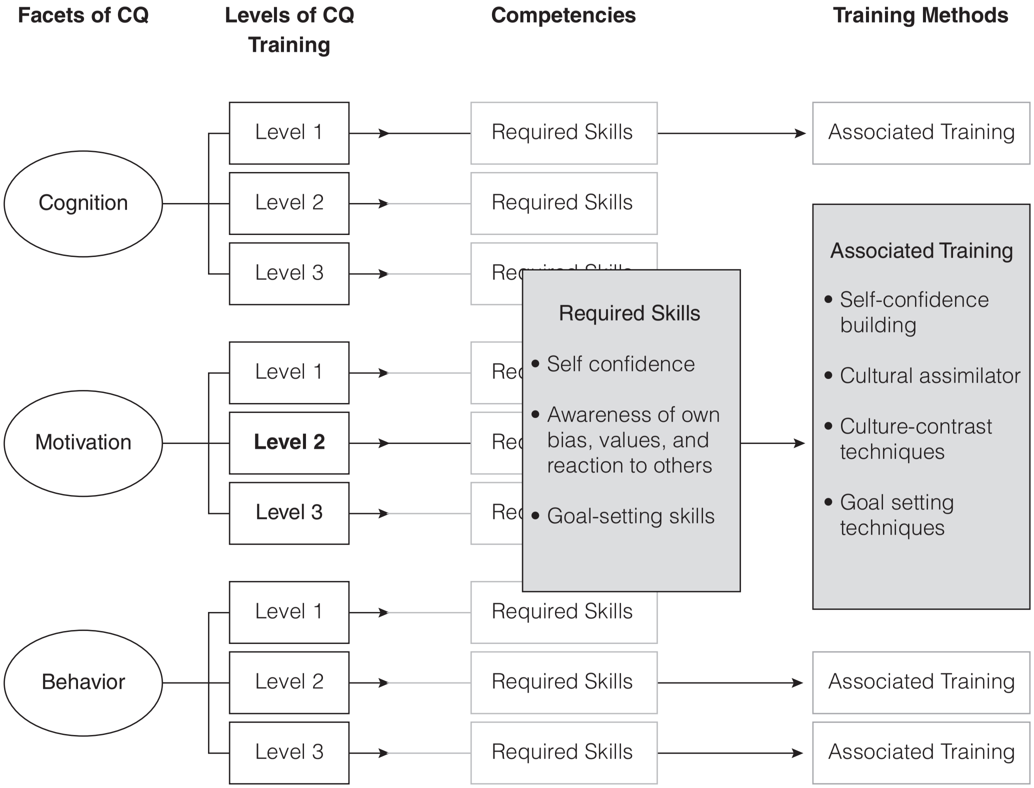

**Figure 10.1.** Training Methods and Cultural Intelligence

pieces of information, a set of training needs can be generated and training for CQ can then be focused on these required areas.

At this point, we remind the reader that while various training may help to elevate one's CQ level, the greater environment and context in which the cross-cultural interaction is taking place should not be neglected. By this, we refer to the various forms of support and incentives structures surrounding the impending cross-cultural experience. This is essentially linked to the motivational aspect of CQ. In a business setting, what this means is that if an organization is sending employees overseas as expatriates, it would probably want to ensure that the appropriate levels of support and reward system are in place. These factors have a significant role in affecting these expatriates' motivational level.

## Cognitive Training for CQ

### *Metacognitive Training*

The purpose of cognitive and metacognitive training is to develop cultural awareness (Zakaria 1999). Developing awareness of specific cultures does not pose an insurmountable challenge as evident in the popularity of cognitive training programs offered by many cross-cultural consulting firms. The key challenge in training culturally intelligent individuals is at the higher metacognitive level. Cross-cultural researchers and practitioners acknowledge that it is difficult to develop the appropriate mental frame of reference for dealing with different cultures worldwide. Bender's (1996) suggested frame of reference includes a basic awareness of cultural differences, which exist between the "home" culture and those with which people are doing, or would like to do business. Tom O'Brien, the former division vice president of International Operations of Polaroid in the United States, supports this: in his view, in order to achieve intercultural competence, one must be able to shift mind-set. But how does one shift one's mind-set and become more adaptive and flexible in one's thinking when crossing cultural boundaries? To answer this question, we need to turn to the literature on metacognition in educational psychology and focus our attention specifically on the regulation of cognition.

Regulation of cognition refers to *a set of activities that help people control their learning*. Metacognitive regulation improves performance: better use of attentional resources, better use of existing strategies, and greater awareness of comprehension breakdowns. Three essential regulatory skills: (1) planning, (2) monitoring, and (3) evaluation are involved. *Planning* involves the *selection of appropriate strategies and the allocation of resources that affect performance* (for example, making predictions before reading, strategy sequencing, and allocating time and attention selectively before beginning a task). More experienced writers, for example, engage in more global as opposed to local planning. *Monitoring* refers to one's *on-line awareness of comprehension and task performance* (for example, the ability to engage in periodic self-testing while learning). Monitoring ability improves with practice and training (Delclos and Harrington 1991). *Evaluating* refers to *appraising the products and efficiency of one's learning* (for example, reevaluating one's goals and conclusions). Gifted children, individuals with high abilities, and experts develop and use more self-regulatory processes like monitoring, evaluating, and correcting (Glaser 1985; Howe 1999).

### *Metacognitive Competencies*

In reviewing metacognition research, our conviction is strengthened that the three key metacognitive competencies of planning, monitoring, and evaluating help individuals gain executive control of behavior, thus enabling them to shift their mind-sets effectively (to use Tom O'Brien's term) when they cross cultural boundaries. These metacognitive competencies are the primary focus of many definitions of metacognition.

We will now elaborate on the three metacognitive competencies: (1) planning; (2) monitoring; and (3) evaluating. In *planning*, we focus on the ability to generate one's own cognitive structures and strategies (to think about one's own thinking). This is critical as culturally intelligent individuals are able to use conditional knowledge in adjusting their cognition to different cultures. In *monitoring*, we focus on five key abilities: (1) ability to reason inductively; (2) ability to engage in deliberative cognition; (3) ability to formulate hypotheses; (4) ability to shift between external cueing and internal regulating mechanisms; and (5) ability to self-monitor. Culturally intelligent individuals are able to focus attention on culturally inconsistent schemas (ability to detect culturally discrepant information) and consequently adjust their cognition to incorporate the new cultural schema through intelligent sense making and reduction of cultural dissonance. In *evaluating*, we focus on the ability to learn about one's own learning. Culturally intelligent individuals are able to think critically and reflexively on their own performance in cultural interactions.

For instance, if an American sojourner or expatriate visits Taiwan for the very first time, and he or she notices a discrepancy between the actual age and the espoused age of a person in Taiwan, this person can use the metacognitive competency of planning by developing his or her own cognitive structure on resolving the discrepancy between the American cognitive schema and the Taiwanese schema on how age is calculated. The American would be thinking about how he or she could adjust his or her way of thinking to the Taiwanese. The American can also use the metacognitive competency of monitoring, which we believe is a core metacognitive competency. He or she could engage in deliberative and self-conscious cognition and formulate tentative hypotheses about the age discrepancy and reason inductively to make sense of the discrepancy. He or she could find out from other Taiwanese (for example, the taxi driver, the tour guide, the hotel concierge, and so on), or actively seek information from other local sources (for example, the museum) on the Chinese calendar and how the Chinese people in Taiwan calculate their age. The American can also reflect on how he or she learns from this episode, that is, thinking critically about how he or she learns this new cultural information or acquires this new cultural schema, and how this would help him or her in other situations.

### *Training Methods for Metacognitive Competencies*

Birenbaum (1996) refers to cognitive competencies such as problem solving, critical thinking, formulating questions, searching for relevant information, making informal judgments, efficient use of information, and so on. Metacognitive competencies such as self-reflection and self-evaluation are critical in the development of cultural intelligence. The development of metacognitive skills helps to internally manage one's own learning. This means that one needs to become aware of how one best learns. The cognitive and metacognitive approach emphasizes internal mental processes. Sojourners, whether they are short term, long term, or multimover, need to have internal strategies to self-manage their learning in new cultural environments. Self-monitoring can help in developing metacognitive strategies that sojourners can internalize to use in their learning.

In Clark's book, *Building Expertise: Cognitive Methods for Training and Performance Improvement* (1998), she explains that the way people receive and process data and store and retrieve information can affect training effectiveness. This explains why some training experiences are extremely effective yet seemingly effortless, while others can be a grueling and painstaking experience. Because the way people receive, process, and retrieve information is vital in training, Clark recommends the use of appropriate cognitive methods for the specific purpose of developing expertise. We agree with Clark's recommendation and believe appropriate cognitive and metacognitive methods of training are critical in developing cultural intelligence.

Clark explains that metacognitive skills are the skills people use to manage their own learning process. A critical element of building metacognitive expertise in developing cultural intelligence is the attention to and provision of metacognitive skill development via the instructional intervention. Clark recommends several learning tactics and instructional strategies to build metacognitive skills. Regarding learning tactics, Clark suggests visual mneumonics, graphic note-taking, and summarization of information (both graphically and in phrases). Other instructional tactics include metacognitive modeling and metacognitive monitoring (Schoenfeld 1987). Thinking visually, creating visual maps, and developing visual models assist in the development of metacognitive competencies.

Because reflective practice is also an important element of developing metacognitive competency, we suggest that both the cross-cultural consultants and their clients "build training and work environments that encourage self-regulation that are correlated with performance improvement" (Clark 1988, 140).

In training for metacognition, we turn to experimental and clinical psychology, which we believe provide novel ways of developing culturally intelligent individuals in the area of metacognition. One fundamental training method is the knowledge elicitation method, which is called *Cognitive Structure Analysis.* Cognitive Structure Analysis systematically and efficiently probes for different classes of knowledge representation and seeks to identify knowledge structures underlying self, social, and cultural schemas. Cognitive processes are the ways people process information. Because people are bombarded with more information (both internal and external cues) than they can process especially when they move to a new cultural environment, they are selective in what they attend to. They are also selective in how they appraise information and the meaning they attribute to it. Cognitive structures are tacit assumptions and beliefs that give rise to habitual ways of construing the self, the others, and the world. The individual's personal schemata, current concerns, and personal goals influence the way information is processed and the way the individual's behavior is organized. Cognitive structures act as "selective filters" and influence how people appraise events. In metacognitive training, it is important that individuals learn how to perform Cognitive Structure Analysis. Failure to understand one's cognition and failure to adjust one's cognition to new cultural situations can be costly for expatriates and sojourners.

Another method that is popular in clinical psychology is called the *Cognitive-Behavior Modification* (or CBM) technique (Mahoney 1974; Meichenbaum 1977, 1986). A basic premise of the CBM approach is that one cannot change behavior without having individuals increase their awareness, raise their consciousness, or notice a behavioral pattern (how they think, feel, and behave and the impact they have on others). There is a need to have participants interrupt the automacity of their thoughts, actions, and scripted nature of their behavior. This would allow participants to talk to themselves and to appraise the situation and their behavior.

In a way, this approach attempts to influence the content and nature of the participants' internal dialogue, that is, it helps participants to become aware of the cognitive structures that influence how they appraise and process events. In using this approach, cognitions can be modified and new behaviors can therefore emerge as a consequence of the changed cognition.

For the purposes of CBM, metacognition can be conceptualized as both the knowledge one has of his or her cognitive processes and the ability to guide and control these processes. It can be thought of as the self-communication one engages in or the internal dialogue one displays before, during, and after performing a task. In using this CBM approach, skills such as self-questioning, planning, and self-monitoring are taught. All these skills are essential in metacognitive training for higher cultural intelligence.

Experimental psychologists are interested in how people solve problems. One problem-solving approach is D'Zurilla and Goldfried's *Social Problem Solving* (SPS) (1971). They defined a problem as a situation in which "no effective response alternative is immediately available to the individual confronted with the situation" (1971, 108). Problem solving is defined as "a behavioral process, whether overt or cognitive in nature, which (a) *makes available a variety of potentially effective response alternatives* for dealing with the problematic situation, and (b) *increases the probability of selecting the most effective response* from among these various alternatives" (D'Zurilla and Goldfried 1971, 108; emphasis added). In adapting to new cultural situations and interactions, culturally intelligent individuals are able to regulate their cognition and optimize their planning, monitoring, and evaluating skills. In metacognitive training, one approach is therefore to develop the individual's ability to engage in deliberative cognition, reason inductively, formulate hypotheses and define problems, generate potentially effective solutions, select the best strategy, and monitor one's performance.

Another training method is the Recognition Model, which emphasizes both fast recognition of familiar situations and more reflective strategies for detecting and resolving potential problems in a current situation picture or plan. Proficient decision makers are *recognitionally* skilled. They are able to recognize a large number of situations as familiar and to retrieve an appropriate response. In these kinds of situations, they are able to act quickly and effectively on "intuition." This "intuition" could be *informal thinking strategies*. Proficient decision makers use informal thinking strategies (for example, make predictions and test them, look for reasons against one's own positions, look for analogies to previous problems) that are not as general as decision theory, but not as particular as domain-specific patterns. Recall the earlier example of the American in Taiwan. The culturally intelligent American would be expected to activate informal thinking strategies to make sense of the discrepancy between the actual and espoused age. A variety of thinking strategies have been identified in the studies of expert performance (Howe 1999). Such strategies have been found in studies on self-regulation or metacognition (Metcalfe and Shimamura 1994), expertise (Ericsson 1996), everyday reasoning (Voss, Perkans, and Segal 1991), and decision making (Cohen, Freeman, and Wolf 1996). We argue that culturally intelligent individuals use such informal thinking strategies as the way to process information and appraise events in new cultural environments. Effective training programs will need to incorporate the training of informal thinking strategies.

## Motivational Training for CQ

In Chapter 5, we discussed the centrality of one's values, self-efficacy, and goals as key determinants of one's willingness to engage a foreign culture. Essentially, we argued that without the requisite efficacy to learn more about a new cultural environment, one may not be willing to do so. Further, a person's value orientation also plays an instrumental role in shaping his preference for engaging in particular actions over others as well as his or her sense of self-concept. Finally, goals are important because they are tightly linked to efficacy. Our goals are determined not only by whether we think we can achieve them (self-efficacy) but also what we consider the outcome of such accomplishment might be. In other words, goals and self-efficacy are complementary elements in an overall model of motivation. Therefore, a confident person with clear goals will tend to be more motivated to deal with the diverse perspectives of members of other cultures and unfamiliar situations. The other motivational factors that were briefly discussed are more external in nature and include congruency to one's career path, job environment, and one's present and historical social context.

There are various ways in which motivation for cross-cultural experiences can be developed. To provide a background understanding of motivational theories and associated techniques, we review work from three key areas of studies: management and organizational behavior (OB); educational psychology; and cognitive and behavioral sciences.

## Motivational Theories from the Field of Management and OB

Motivational theories from the field of management and organizational behavior are well developed and can be broadly classified into three areas: internal focused, external focused, and cognitive outcome evaluation oriented. The internal focused set of motivational theories pertains to the inner needs and drives of individuals. Examples include Theory X and Theory Y, Maslow's Hierarchy of Needs, Herzberg's Hygiene-Motivation Theory, and McCelland's theory on power, affiliation, and achievement orientation. The external focused set of theories, by contrast, tends to involve job environment and characteristics. These theories basically argue that job design, organizational climate, and proper reward or incentive structures are central to motivating employees. Examples of such theories include the Requisite Task Attribution Theory by Turner and Lawrence (1965) and the Reinforcement Theory. Lastly, the third area of motivational theories deals with the cognitive outcome evaluation aspect of human motivation. This school of thought mainly advocates that people rationally compare and evaluate the pros and cons, input and outcome of various actions. Popular theories in these areas include Expectancy Theory, Goal Setting Theory, and Equity Theory. In general, motivational theories from the management and organizational behavior fields tend to be more concerned with creating a motivating workplace for employees.

It is not our intention to elaborate on these theories; they have been extensively covered in most management and organizational behavior textbooks. Rather, our emphasis is on how these theories could be applied to the motivational training of CQ. From this body of management research, we have found several theories that can be used to help people increase the motivational facet of their cultural intelligence. For instance, the Goal Setting Theory is particularly useful in the sense that through appropriate training in goal-setting skills, a sojourner can become more focused and goal-oriented in his or her dealing with members of other cultures. A person who goes into a culture with specific goals or outcome expectation tends to benefit more as a result of the encounter. This will in turn increase this person's self-efficacy level, motivating him or her to engage more deeply with the culture. Hence, goal-setting skills are an essential competency in CQ.

The internal focused set of motivational theories concentrate on the fact that people have diverse needs and values. This is very much in line with our thesis that value orientation is one of the central factors of CQ motivation. The question then is how do we address these issues about value orientation and help people improve their motivation level. The first step is really self-awareness. People going for cross-cultural exchanges ought to become in touch with their personal preferences, values, and biases. One way to cultivate this sense of greater self-awareness is through attributional training, using techniques such as culture assimilators and self-awareness training that involves the Culture-Contrast Technique. Traditional self-awareness instruments that help an individual find his or her power, affiliation, and achievement profile can be useful but may not have a direct impact on improving CQ per se.

Finally, the external focused set of motivational theories reminds us of the importance of creating an environment conducive for cross-cultural interactions. For organizations intending to send employees overseas, this is highly relevant. The Social Information Processing Theory (Salancik and Pfeffer 1978) argues that people adopt attitudes and behavior in response to social cues provided by others with whom they have contact. The Job Characteristics Theory (Hackman and Oldham 1976) says that a set of core job characteristics impact a number critical psychological states, which, in turn, influence a set of affective and motivational outcomes. What this means for organizations is that while it is possible to increase a person's CQ through appropriate training, they must create the right environment. It is not going to help if the task an expatriate is going to undertake is considered unchallenging, or worse still, the expatriate is to find him- or herself surrounded by colleagues who are extremely negative about overseas posting. An appropriate incentive and reward structure is obviously necessary.

### Motivational Theories from the Field of Educational Psychology

Motivation is also a well-researched topic in the field of educational psychology. However, in this field, the concern is toward sustaining interests and involvement in a goal-oriented task by a student or learner. We find theories from this area to be highly relevant because a person adjusting to a foreign culture is very much like a student or a learner trying to grapple with new and unfamiliar situations or concepts.

The common themes resonating through the study of motivation in education appeared to be centered around issues such as relevance, self-efficacy, and curiosity. A learner tends not to be very motivated to learn a subject if he or she perceives the subject to be irrelevant to his or her needs. Likewise, an expatriate will not be keen to understand a foreign culture if he or she does not see how such understanding can be relevant to his or her work. Thus, it is imperative that a cross-cultural experience is framed as pertinent and related to one's overall goals. A student going overseas to pursue a degree has to appreciate that by better understanding the foreign culture, he or she will be better equipped to perform academically (his ultimate goal). Similarly, a businessperson going to a foreign country to negotiate a deal has to appreciate that one's understanding of the way deals are closed in that country will be instrumental to one's success.

*Self-efficacy* is key to effective learning as well. A student who has low confidence of his or her own ability tends to have difficulty taking on challenging and unfamiliar subjects or topics. To motivate such students, teachers have traditionally made use of various techniques from the Reinforcement Theory, which essentially advocates that behavior is a function of its consequences. Some of these techniques include positive reinforcement, negative reinforcement, and punishment.

In positive reinforcement, a teacher would consistently reward certain positive learning behavior thereby building up a student's confidence. Negative reinforcement, by contrast, refers to the absence of such rewards for undesired behavior. Punishment goes one step further to penalize students for negative learning behavior. We are not suggesting that these techniques be used directly for increasing motivation for cross-cultural experiences. However, appropriate lessons can be drawn. For example, we should realize from positive reinforcement techniques that success builds on success and confidence builds on successes. Translated to a cross-cultural training setting, it implies that we ought to incrementally build up a trainee's confidence toward cross-cultural interaction by guiding him or her through a series of successful interactions with a foreign culture. One possible way is to expose an uninitiated person through a series of short, simple, and controlled cross-cultural interactions in the classroom. As he or she builds up greater confidence, greater complexity could be added and progressively graduating to an actual encounter.

Curiosity, our third theme, refers to the desire to know. Berlyne (1960) believes that curiosity is a motivational prerequisite for exploratory behavior. Without a significant level of desire to know about a foreign culture, one is unlikely to expend too much effort to engage it. In educational psychology research, one of the identified components of curiosity is inquiry arousal—noticing a phenomenon and asking questions about it. We all begin our life on this earth as inquirers as we seek to explore the world by experimenting and observing—trying things out, watching what happens. Hence, in a sense most normal people already have some form of innate curiosity. Langevin (1971) has conducted research in the area of curiosity and classifies measures of curiosity into two categories. First, curiosity is viewed as a motivational state and measured with behavioral indices. Second, he conceptualizes curiosity as a personality trait that is assessed by personality measures. We believe that curiosity is, to a large extent, linked to personality and difficult to be altered in the short term. However, there are certainly factors that can kill a person's drive to seek knowledge. Therefore, in our quest to increase motivational level toward cross-cultural experience, we should be looking at reducing such negative factors. We have discussed some of such negative factors before. Examples include a negative, nonsupportive environment and the perceived irrelevance of the cross-cultural experience.

There are many ways to look at motivational issues in learning. Researchers from the Harvard Graduate School of Education, John Comings and Andrea Parrella, make use of force field analysis, a sociological model that looks at an individual in a field of forces that act to support or inhibit action to study adult learner's motivation. We find this approach applicable to training the motivational facet of CQ. By identifying the positive and negative forces that affect motivational level for cross-cultural interaction, we can create customized training approaches to help enhance a sojourner's motivation and persistence during a cross-cultural encounter. For example, a positive force for engaging a foreign culture could be high self-efficacy. A highly confident person tends to be more motivated to take on unfamiliar situations. A negative force, by contrast, could relate to one's value orientation. For instance, if someone has a strong prejudice against a certain culture or race, it is unlikely that he will be motivated to make an effort to understand and appreciate the customs and practices of this culture.

### Motivational Theories from the Field of Cognitive and Behavioral Sciences

Some theories from the field of cognitive motivation can be used to help us look at the motivational training issue of CQ. In particular, cognitive consistency theories, based on the idea that relationships between thoughts, beliefs, attitudes, and behavior can generate motivation, is useful. Central to these theories is the tension that exists among these various components. In the Balance Theory (Heider 1958), there exists a tendency for relationship among people and objects to be balanced. Relationships can be negative or positive. A positive relationship may involve liking or agreeing with someone or an issue. A negative relationship then means disliking or disagreeing. Heider analyzed the behavior of triadic (involving three person or objects) situations in terms of balance and argued that when an imbalance occurred, motivation will be triggered to return the relationship to balance. To cite an example of imbalanced relationship in a cross-cultural setting, consider the following. Manager A and Manager B are from two different cultures. They are to work together on a project concerning issue C. However, A and B have different opinions on C, given their respective cultural backgrounds. A state of tension thus exists. If A and B dislike each other, then there is really low motivation to resolve the tension. Why would A care about how B thinks when A is not interested in working with B in the first place? However, if Manager A and Manager B genuinely want to make their cross-cultural project work and they like and respect each other, they will be more motivated to resolve this tension. Hence, key to a positive cross-cultural experience will be an expatriate's attitude toward his foreign counterpart. A positive attitude will hence generate a greater motivation to make things work. Therefore one important aspect of motivational training for CQ would be to changed attitude of people toward other members of a foreign culture.

Another theory, the Cognitive Dissonance Theory by Festinger (1957), focuses on the idea that we attempt to maintain consistency of our beliefs, attitudes, and opinions with our overt behavior. Dissonance occurs when there is inconsistency involving two or more of these elements. For example, if one is forced to behave in a certain way but that behavior is in conflict to one's belief, then dissonance will occur. As Festinger suggests, a person actively tries to avoid situations and information which would likely increase the dissonance. The implication for us is that dissonance is evitable in cross-cultural encounters, and people may actively avoid such encounters instead of trying to reduce such dissonance. The ways in which we can reduce dissonance then becomes central to improving motivation. If we can teach people to reduce dissonance that they will inevitably encounter in cross-cultural interactions, they will be less inclined toward avoiding such interactions.

There are three ways in which dissonance can be reduced (Petri 1986). First, people can change their attitudes. For example if dissonance occurs because a sojourner is uncomfortable with the gesture of close same-sex contact in a given foreign culture, he or she can reduce that dissonance by changing his or her attitudes toward such gestures. A second way to reduce dissonance involves changing of one's outward behavior. Suppose an expatriate comes from a country where belching after a meal is a perfectly acceptable; he or she may want to refrain from that action when interacting with members of another country in which such behavior is discouraged. A third way to reduce dissonance is to introduce a third element that effectively reduces the dissonance without changing any of the existing conditions. This process is similar to rationalization. To give an example, suppose a foreign student finds him- or herself in a new learning environment where local students are extremely passive and unwilling to question the teacher during class. He or she does not want to change his or her behavior to become passive like the rest and neither does he or she deem fit to change his or her belief that such passive behavior is indeed good for learning. So what can he or she do? Well, he or she can reduce the anxiety in this situation by finding additional rewards in the situation. For instance, the foreign student may rationalize that while the local students are really too passive in a big class, they are extremely helpful and participative on a one-to-one basis, and that lively intellectual discussion can still take place in a smaller group. This will help retain his or her motivation to continue his or her study in the foreign environment.

In a related stream of research, Bem's Self-Perception Theory (1972) argued that when one is unsure of one's attitudes, one infers them by observing one's own behavior (as others would) and the circumstances under which it occurs. In other words, when one feels that one's attitudes are weak or ambiguous, one tends to take the position of an outsider observing oneself. There are two important implications to this theory. First, self-perception helps one to acquire a greater sense of self-awareness. If one is able to "observe" oneself from an external perspective, one can become more aware of one's own behavior, attitudes, and feelings at a given point in time. This can be particularly useful in cross-cultural interactions. When confronted with a novel situation involving a member of a foreign culture, self-perception will help one to monitor one's overt behavior as engaged in the interaction. This will help one to assess and evaluate one's "performance" during the cross-cultural experience and make the necessary adjustments as appropriate. Second, one's expression can influence one's feelings and attitudes. By putting on a smile and perceiving that one is doing so, one actually feels happier. In a cross-cultural context, one can make use of explicit or conscious thoughts or expression to help oneself "get into the act," thereby achieving motivational effects.

Both Cognitive Dissonance Theory and Self-Perception Theory rely heavily on self-awareness. This is hardly surprising because in order to detect dissonance with the external environment or perceive one's state of being, self-awareness is a necessary condition. Self-awareness theories (Duval and Wicklund 1972) argue that conscious attention can be directed outward (toward the external environment) or inward (toward the self). When the focus is inward, what one experiences is objective self-awareness, a condition that is inherently self-evaluative. This condition can be painful or discomforting because it triggers a comparison between the "real" self and the "ideal" self. As in dissonance theories, an individual would then strive to eliminate this discomfort by activating the appropriate mechanisms. One approach, of course, is to escape the state of self-awareness. The other possibility is to engage the discomfort by trying to change the real self or the ideal self. In a cross-cultural experience, if an individual's response is the former (that is, to run away from the discomfort), his or her motivational level to engage the new culture is obviously low. A person who is high in motivational facet of CQ would instead seek to modify oneself to adapt to the new environment.

### *Building up CQ Motivation*

Self-awareness, a sense of curiosity, self-efficacy are important personal characteristics. People should also be prepared to change their attitudes, overt behavior, and even engage in some form of rationalization when necessary. On the environmental level, the organization sending its people overseas should look into the relevance of the trip and concentrate on creating a supportive and conducive environment for cross-cultural interactions through appropriate reward structures and policies.

The diagram presented in Figure 10.2 summarizes a possible framework to view the motivation facet of CQ. The positive-negative dichotomy at the center is derived from force-field analysis. To improve the overall level of motivation toward cross-cultural encounters, we therefore have to work at the following three areas:

1. creating a positive environment for cross-cultural interaction;
2. strengthening the positive forces that drive a person to engage a foreign culture; and
3. weakening the negative forces that inhibit such engagement.

Some examples of positive and negative forces toward cross-cultural experiences and associated intervention techniques are:

*Positive Forces*

1. curiosity or explorative tendency;
2. self-confidence; and
3. clear goals and objectives.

*Negative Forces*

1. dissonance among belief, attitude, action, and so on;
2. negative attitudes, for example, prejudice, bias, stereotyping, and xenophobia; and
3. fear or resistance toward change.

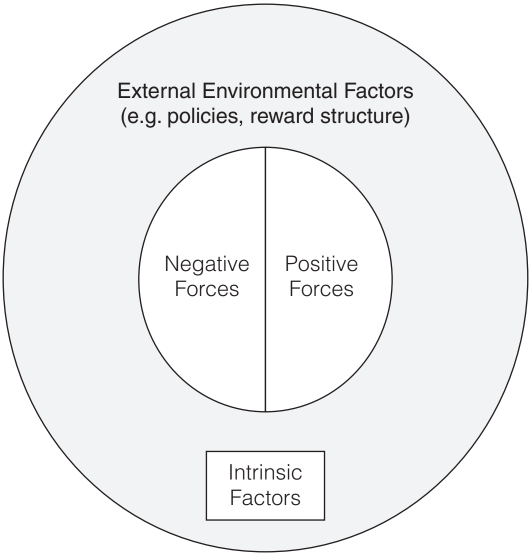
External Environmental Factors
(e.g. policies, reward structure)
Negative Forces
Positive Forces
Intrinsic Factors

**Figure 10.2.** Positive and Negative Forces Toward Cross-Cultural Experiences and Associated Intervention Techniques

To enhance the positive forces, one can frame the cross-cultural experience such that it is highly relevant to the sojourner's overall goal thereby increasing curiosity and explorative tendencies; attend confidence-building programs so as to build up self-confidence or even expose oneself to foreign cultures more often so as to improve through experiential learning. Conversely, one may take steps to reduce negative forces that impede cross-cultural interactions. Examples include changing one's attitudes toward members of other cultures, increasing one's level of self-awareness, becoming more conversant with managing, and coping with changes that come concomitantly with any entrance into a new culture.

The astute reader may notice the positive forces presented above are none other than the competencies required for a high motivational level toward cross-cultural encounters. We view competencies as positive forces because these are aspects that need to be strengthened.

Masny of the CQ training techniques presented above have been described previously when we reviewed existing cross-cultural training programs. We would like to emphasize the techniques that are less developed for the purpose of cross-cultural training. They are goal-setting and attitude change. For goal setting, we will further elaborate by linking it to the self-efficacy and metacognition aspects of CQ.

### *Goal Setting*

Going into a foreign environment to engage and interact with members of a different culture is not unlike a sporting experience. If an athlete wants to succeed in playing his or her sport well, he or she needs some sort of references to constantly assess his or her condition and performance. For instance, he or she needs to know how to assess the toughness of competition and how he or she thinks he or she measures up (self-efficacy). Actual performance during a game should also be constantly assessed. Further, the athlete also needs some form of focal point for precompetition and in-competition strategies and contents. Hence, goals influence two important factors in sports—how a performance is viewed and how an athlete considers he or she will perform. The latter is linked to self-efficacy. That is why, very often, despite extensive physiological conditioning and skills preparation, it is an athlete's appraisal of what is to be done, how well he or she is prepared to do it that affects the quality of a performance.

Likewise, a businessperson going to a foreign country to negotiate a deal needs references to assess the content and purpose of his or her trip, the perceived task-difficulty, his or her level of self-efficacy, and his or her actual performance during the business interaction. In addition, like the athlete, he or she needs a focal point for prenegotiation and in-negotiation preparations and strategies. As such, we find that goals-setting skills designed for athletes' training particularly useful in cross-cultural training. Rushall (1995) in his book *Mental Training for Sports* illustrated how goal setting can be used to enhance sporting performance. Drawing on his techniques, we would like to show how this can be applied to help a person in a cross-cultural encounter.

First of all, goals should be restricted to performance expectations over which an athlete, or in our case, a sojourner into a foreign culture, has control. This is because external elements that cannot be controlled produce uncertainty that in turn destroys confidence. Hence, it is not beneficial for a foreign student to set a goal for his or her first encounter with his or her foreign classmates that he or she wanted to be well-liked by them. This is because there are so many factors affecting whether a person is well-liked or not. In this case, it is far better for the foreign student to set the goal of wanting to be able to learn more about a specific customary practice in the new environment, for instance, how class discussions are conducted. However, a student going overseas is likely to have more than one goal. Hence, an inventory of goals needs to be set up and evaluated for their appropriateness and possibility. Then, one or two appropriate ones could be selected for achievement in a given encounter. As far as possible, such goals should be specific and assessable. To continue our example of the foreign student, the goal of wanting to know how class discussions are carried out in a foreign culture is a good one. Not only is it specific, the student could, at the end of the encounter, assess whether he or she has found out what he or she had set out to discover. In a cross-cultural encounter, two types of goals are especially useful—*performance goals* and *activity* goals. Performance goals are those that indicate some performance standard or outcome that is to occur at a particular time. Wanting to find out how class discussion is conducted in a foreign setting is a form of performance goal. Activity goals are those that stipulate the factors to be achieved in a specific performance attempt. In running, it could be to execute a new technique feature in a race. In the case of our foreign student, it could be to practice a newly learned social gesture during the cross-cultural interaction. With proper goal setting, the student is likely to progressively gain momentum and confidence about his or her cross-cultural encounter, thereby motivating him or her to continue to engage him- or herself with the new environment.

### *Goal Setting and Self-Efficacy*

The process of goal setting as a motivational technique is linked to one's level of self-efficacy. Bandura (1997) argued that efficacy beliefs contribute to motivation by influencing the challenges and hence the type of goals people pursue, the effort they would expend and their level of perseverance in face of obstacles and failures. Indeed, while we advocate that goal setting is a useful way to increase a sojourner's motivational level in cross-cultural interactions, we need to also address the associated goal properties and goal-achievement process. It is of little use if our student in the previous example does not set goals at the appropriate level and adopt the appropriate strategies to achieve them. For instance, if he or she sets an extremely easy goal, he or she is not likely to gain as much from the interaction if he or she had set a more challenging one. It is also futile if our student gives up too quickly once he or she sees that the goals set are not being achieved in a particular interaction. The success of goal setting depends greatly on an individual's level of self-efficacy in the following ways.

First, self-efficacy affects the type of goals chosen as well as the level at which goals are set. A sojourner with high self-efficacy tends to set more challenging goals. A large body of research has shown that the higher the goals, the harder people work to attain them. With regard to the types of goals chosen, Gist and Mitchell (1992) argued that self-efficacy influences one's task choice, effort, and thought pattern, thereby facilitating the adoption of different goal orientation (Dweck and Leggett 1988). As a result, low self-efficacy tends to be associated with performance-oriented goals (focus is on demonstrating one's competence to oneself or others), while high self-efficacy tends to be associated with mastery-oriented goals (focus is on enhancing one's task competence). Second, self-efficacy affects the strength of commitment to these goals, including the amount of effort one is willing to expend in achieving the goals. An individual who has sufficient confidence in achieving his goals is more likely to expend the necessary effort to engage a foreign culture. In our earlier example, if our foreign student is confident that he or she is able to grasp the salient points on how class discussions are conducted in the new cultural setting, he or she is more likely to invest time and energy in uncovering them. Third, people's confidence in their ability to implement chosen strategies affects strategy choices. Bandura (1997) suggested that those who judge themselves to be most efficacious are more likely to take on risky or challenging tasks or in our case strategies in order to achieve certain ends. Wood, Atkins, and Tabernero (2000) also suggested that perceived capabilities for conducting searches in different modalities and for the processing of information, including the use of tools to overcome cognitive limits, can have differential impact on the use and choice of strategies in dealing with complex problems. Going back to our example, the student may have a few options open to him or her when he or she strives to discover how classroom discussions are conducted in his or her foreign school. For instance, he or she may choose to totally immerse him- or herself in the situation and go with the flow of things, thereby experiencing the discussion firsthand. Alternatively, he or she may choose a more passive approach of simply observing how discussions go. Which strategy he or she chooses depends on his or her level of self-efficacy. Finally, self-efficacy level affects how long one is likely to hold on to one's goal in face of obstacles and difficulties. Engaging a foreign culture is by no means an easy task, and any uninitiated sojourner is likely to meet with countless difficulties at the beginning. How long will one persist? Self-efficacy plays an important role in answering this question. A person who believes that he or she has the ability to eventually overcome the obstacles and problems faced is more likely to persist and continue to engage the foreign culture. In a study by Vrugt, Langereis, and Hoogstraten (1997), it was found that students with low self-efficacy appraisals and weak malleability beliefs tend to ascribe failure to lack of talent more than those with high self-appraisals of efficacy and strong malleability beliefs did. The attribution of setbacks to lack of talent can then have a demotivating effect. Likewise, in a cross-cultural encounter, a sojourner with low self-confidence may attribute his or her inability to engage members of the foreign culture to his or her lack of aptitude for such interactions and give up trying in future occasions.

Hence, the key message is that while we develop the goal-setting skills of would-be sojourners, it is also important to pay attention to their self-efficacy training.

### *Goal Setting and Metacognitive Strategies*

Goal setting also has implications on the development of metacognitive strategies. Specifically, we argue that goal setting can be used to induce metacognitive strategies necessary for engaging foreign cultures or unfamiliar settings. Three broad categories of metacognitive competencies are (1) monitoring (including the ability to detect discrepancies or culturally inconsistent schemas and switching between external cueing and internal regulation); (2) evaluating (including the ability to critically assess one's performance in a cross-cultural interaction); and (3) planning (including the ability to strategize on when to acquire specific knowledge and when to apply which form of knowledge).

Based on our goal-setting approach toward increasing the motivational aspect of CQ, before a sojourner enters into a cross-cultural interaction, he or she will have to identify the goals he or she wants to achieve in this interaction. How does he or she do that? Obviously, he or she must be aware of his or her knowledge gaps with regards to the foreign culture. Supposed the sojourner is a Western manager going to China for a business negotiation. His or her attempt to set a goal for this encounter will trigger his or her thinking about what he or she does not know about doing business in China. For instance, he or she may identify a gap such as the lack of knowledge of how business teams work in the Chinese cross negotiation context. Do all the team members engage in negotiation or will just the leader do so? What roles then do the team members play? This process involves evaluating what the manager knows and what he or she does not know. The planning aspect of metacognition may also be triggered at this stage. Inevitably, one expects multiple knowledge gaps to be filled for a fresh sojourner. Which one should he or she target first? Which set of knowledge about this foreign culture would be most instrumental in helping him or her move forward?

Once a goal is set and the business manager enters into the cultural encounter, he or she will have to constantly monitor if this knowledge gap is filled. While doing so, he or she may also need to adjust strategies if he or she finds that one approach toward achieving the goal is not working well. At the same time, as the sojourner moves deeper into the encounter, he or she may discover or even anticipate potential gaps previously not identified. Hence, through goal setting, the metacognitive skills of evaluating and monitoring are triggered into play during the interaction itself.

### *Attitude Change*

The other way to increase motivation toward cross-cultural encounter is through changing of attitude. Many people have problems in engaging members of other cultures because of some prior prejudice or bias. These prejudices or bias could have come about due to one's value orientation or from unpleasant past experiences. As a result, one may consciously or unconsciously avoid interaction with these people. In any case, if we want to make this person more receptive to such cross-cultural interaction again, we need to change his or her attitude. In helping people make behavioral or attitudinal changes, we find the six-stage model for change proposed by Prochaska and DiClemente (1983) especially helpful. The central thesis of Prochaska and DiClemente's model is that changes do not take place overnight. Rather, change takes place through each of the following six stages:

1. Precontemplation Stage: This is the stage in which a person becomes aware of a possible problem that may require change but has not contemplated any action to make the change.
2. Contemplative Stage: This is the stage in which a person starts to consider change as a possible course of action. People who do not move beyond this stage will reject change.
3. Determination Stage: At this stage, a person decides that he or she wants to do something to make a change. Typically, a person will set appropriate goals and make the necessary preparation to change.

4. Action Stage: After deciding that change is in order, the next step is to take action to make the change. There can be many techniques involved. Some examples include stimulus control (recognizing triggers).
5. Maintenance Stage: In this stage, change has taken place and the goal is achieved. The challenge is to maintain status quo and avoid relapsing into the previous condition.
6. Relapse Stage: This is a stage in which an individual reverts back to "old ways" and is one which should be avoided. Stress and lack of support could make it difficult to maintain a positive change.

Applying this six-stage model to changing of attitudes to facilitate cross-cultural interaction, we see that the first step is to realize the presence of a problem. Suppose an expatriate being posted to a country, say X. However, he or she is not terribly excited about it because he or she has the preconceived notion that workers from country X are lazy and extremely difficult to manage. Suppose further that this is a misconception. To help him or her increase his or her motivation toward the impending posting, we have to help him or her realize that his or her attitude toward workers in country X is a potential problem for his or her assignment there. We can start off by talking to this executive about the kind of problems he or she will likely encounter when he or she goes to country X. Some of these problems could be related to his or her prejudice toward workers in country X. The Culture-Contrast technique can also be used to promote greater self-awareness. Next, we have to help him or her realize that to resolve these problems, there is a need to correct that prejudice. However, it is likely that the executive may resist, especially if the prejudice is strong. Hence, as a helper, we need to be able to observe such possible resistance and address it. One way is to remind him or her of the ultimate goal that he or she is trying to achieve through this posting and how a change can help him accomplish this goal. This is essentially the contemplative stage. At the next stage, the determination stage, we will help the person set goals and make plans to effect the change. A possible goal could be to reduce the intensity of negative feelings toward workers of country X (note that it may not be possible to totally eradicate such feelings). During the action stage, concrete steps have to be taken to help effect the change. In this case, it may mean exposing him or her to examples of the positive work attitude of workers in country X or actively identifying triggers which often lead to the notion that workers in that country are lazy. A helper's role in this case will be to constantly provide support and advice during the change process. Finally, whenever an improvement has been made, it is important to maintain it and prevent it from regressing.

So far, what we have looked at are ways in which various techniques can be employed to increase the motivation level for cross-cultural experiences. By no means is this account comprehensive. What we are trying to illustrate here is that it is possible to take steps to improve motivation level for cross-cultural encounters and thereby increasing one's CQ level.

## Behavioral Training for CQ

### *Behavioral Training*

Behavioral training is significant because participants will need to integrate the information gained from a culturally competent assessment and the motivational force arising from the cultural engagement into culturally appropriate behaviors in the actual interaction.

In the literature on cross-cultural training, cross-cultural communication skills or intercultural communication competence are considered to be important for expatriate workers because these skills are assumed to assist in helping expatriates to interact and behave appropriately in the target culture (Beamer 1992; Gudykunst 1993; Kim 2001; Ting-Toomey 1999; Wiseman and Koester 1993). Cross-cultural communication skills, such as listening and observing, include the ability to build trust and understanding between people of different cultures. However, these skills are too general to be useful in helping us identify behavioral competencies in developing cultural intelligence. In examining communication skills, researchers and practitioners have also highlighted the importance of the expatriates and sojourners' ability to communicate in the language of the host culture. Being able to communicate in the language of the host culture, we assert, may not really correlate with culturally intelligent behaviors. We need to distinguish between different kinds of sojourners. Kim (2001) categorized sojourners into long-term sojourners, short-term sojourners, and multimover sojourners. According to Kim, short-term and multimover sojourners have less reliance on "host communication competence," and therefore they need a different behavioral competency to function effectively in diverse cultural environments. With few exceptions, research has focused predominantly on the importance of communication competence and interaction skills for effective cross-cultural adaptation. Behavioral correlates of cultural intelligence, by contrast, have received very little attention in the field. We address this issue by identifying the behavioral competencies in our training framework.

Having competent communication skills and the ability to communicate in the language of the host culture may not be adequate. In line with our competency-based training framework on cultural intelligence, we identify the following behavioral competencies: (1) the ability to create positive and favorable self-impressions on others, or self-presentation; (2) the ability to frame; (3) the ability to script; (4) the ability to stage; and (5) the ability to perform. These competencies are based on the dramaturgical approach (Goffman 1959). Of course, individuals who are culturally intelligent would be able to recognize the actions and behaviors relevant to meaningful interactions in the host culture because they have the ability to acquire schemas of the host culture and information about the interrelationships among the schemas of the host culture and to actively try to reorganize their native culture schemas or to generate new schemas in order to adapt to the host-culture environment. More than that, we expect culturally intelligent individuals who may not be able to speak the language of the host culture or have "host communication competence" to be able to behave and interact appropriately in different cultural environments. We make an important clarification here: culturally intelligent individuals do not need to be polyglots or people who can speak diverse languages. Behavioral competencies provide a more efficient and meaningful account of culturally intelligent behaviors.

Some studies have reported negative associations between brain activity under cognitive load and intelligence (Haier et al. 1988; Jausovec 2000). The reported results suggest that intellectually competent individuals during problem solving were less mentally active than individuals with average intellectual abilities. This efficiency theory also explains the difference between individuals who are culturally intelligent and those who are not. Adapting to a new culture is similar to problem solving. How do individuals make sense of a new cultural environment and then, based on the appraisal of the cognitive, affective, and behavioral expectations, decide how to enact culturally appropriate verbal and nonverbal behaviors. "Intelligence is not a function of how hard the brain works but rather how efficiently it works" (Haier et al. 1992, 415). To this, we add that cultural intelligence is not a function of the number of languages individuals know, or how much "host communication competence" individuals possess.

In our cultural intelligence training framework, we emphasize the culture-general approach in training and developing cultural intelligence. Scholars generally agree that although culture-specific training is valuable, it is important to complement it with a culture-general approach and train participants how to learn and use the knowledge acquired as a heuristic schema by which they can adapt to various cultural situations (Brislin 1986). In our training framework, our focus is on the culture-general approach.

### *Behavioral Competencies*

We attempt to construct a behavioral competency model that would lead to the training and development of culturally intelligent individuals. Our training framework is grounded in the *dramaturgical* approach developed by American sociologist, Erving Goffman (Goffman 1959, 1967, 1974), and the works of scholars who have applied the dramaturgical approach in studying individual and leadership behaviors in organizations (Brissett and Edgley 1990; Benford and Hunt 1992; Gardner and Martinko 1988; W. Gardner 1992; Gardner and Avolio 1998). In his classic work, *The Presentation of Self in Everyday Life*, Goffman (1959) proposed a dramaturgical approach where he claimed that in order to have effective interpersonal encounters individuals must put on a "performance" (hence the use of the term "dramaturgical"). According to Brissett and Edgley (1990), the interaction context shapes the meaning of human behavior. Analysis rooted in the dramaturgical approach regards the theater as a metaphor for understanding conversational and interactional encounters. The expressive engagement of one individual with another and the behavioral enactment of that performance in conjunction with other individuals can influence the meaning and perception of the interaction. For performances to be successful, both parties must pay attention to their own demeanor while offering an appropriate level of deference to the other party.

We advocate the dramaturgical perspective in cross-cultural training of behavioral competencies for two important reasons. First, it has been widely acknowledged that expatriates and sojourners have to create the right impressions when they meet someone from another culture the first time. Committing a cultural faux pas during an introductory meeting or first encounter could have adverse consequences, and first impressions due to primacy effect can affect subsequent interactions. This means that culturally intelligent individuals know how to bolster their image of competence and confidence by creating the right impression. Second, the management of impressions takes place in the context of social interaction where culturally intelligent individuals engage in "performances" in various cultural environments to shape the perceptions of the people they interact with.

In *self-presentation*, we focus on the ability of individuals in expressing themselves to and in conjunction with others, to create positive meaning for themselves or favorable impressions of others about themselves. The ability to create positive and favorable impressions of one's self is a fundamental behavioral competency of culturally intelligent individuals. First impressions count a lot in any social interactions, and this includes social interactions across cultural boundaries. Culturally intelligent individuals know how to create a favorable image for themselves and how to shape the perceptions of others.

In *framing*, we focus on the ability of individuals to use framing techniques to manage meaning in cultural interactions (Goffman 1974). Framing involves communication (both verbal and nonverbal) in shaping the social perceptions of others. Culturally intelligent individuals would know why and when they communicate verbally or nonverbally, and to enact culturally appropriate verbal and nonverbal behaviors. Culturally intelligent individuals are able to frame contexts appropriately by not only identifying the appropriate context but also influencing the way their behaviors would be appraised positively by others.

Let's take the example of William Shakespeare's *Romeo and Juliet.* If we were to witness the staging of this play based on the epoch in which the play was historically based, and if the play was staged at the Royal Shakespeare Theatre at Stratford-upon-Avon in England, our interpretation of the play would be influenced by the historical context of the play and the theatre venue. However, movie studios in Hollywood have recently produced a number of movies based on Shakespeare's plays. In Baz Lurhmann's recent adaptation of *Romeo and Juliet* for the big screen, the play is set in twentieth-century California and stars Leonardo Di Caprio. All the characters in Baz Lurhmann's movie, including the feuding families of the Capulets and the Montagues, used the text from Shakespeare's original play in their dialogues. Yet, the movie is perceived to be different from Shakespeare's original play. Setting the play in twentieth-century California frames the way audiences would view and respond to the tragic love story between Romeo and Juliet. This example of framing is particularly important in training behavioral competency.

Individuals who wish to develop their cultural intelligence would need to learn how to identify the appropriate context, whether formal or casual, in cross-cultural interactions. In interacting with people from a different culture, culturally intelligent individuals can activate their metacognitive competencies to adjust their cognition to the appropriate context. They know that socializing with a businessperson from another culture at a pub is not quite the same as socializing at a formal dinner function. Words and forms of expressions that could be used in a casual context may be totally inappropriate in a formal context.

In *scripting*, we focus on the ability of individuals to "script" the cultural interaction which allows them space for flexibility, adaptation, and improvisation. This notion of behavioral fluidity is central in our conception of culturally intelligent behaviors. Benford and Hunt (1992) defined "scripts" as emergent guides for interactions that are sufficiently circumspect to provide cues for behavior when unexpected events occur, and yet flexible enough to permit improvisation. Culturally intelligent individuals are able to adapt their behaviors to various situations, and to improvise as required. They are not locked into rigid behavioral scripts. We argue that culturally intelligent individuals have a repertoire of contingency-based behavioral scripts that they can enact to deal with situational exigencies. They are able to enact culturally appropriate behaviors, and their ability to improvise means that they are able to stay on top of things and cope with unexpected and emerging interactional demands in new cultural environments. It is, as it were, that culturally intelligent individuals could draw on themselves or their experiences to guide their interactions, not dissimilar from the Stanislavski's "Method" of acting (Benedetti 1998; Hirsch 1997; Parke 1993) who is modern theater's most pioneering thinker. For a good introduction to the "Method" of acting, the reader can consult either Benedetti (1998) or Parke (1993). In grounding our training framework within the dramaturgical approach, we are deliberately making an explicit connection between cultural intelligence training and the world of acting (performing arts). Culturally intelligent individuals are in a sense virtuoso performers with distinctively high abilities to improvise and adjust their performance as they encounter new cultures.

In *staging*, we focus on the ability of individuals to attend to and use an appropriate range of culturally appropriate symbols in orchestrating their self-presentations (for example, DePaulo 1992). These symbols could be verbal, nonverbal, and artifactual. Culturally intelligent individuals know how to appropriate and manipulate these symbols to create favorable self-presentations in their interactions. A Chinese expatriate or sojourner in America may know in his or her mind that attending a formal dinner there may require the appropriate formal attire. He or she may even have the requisite motivation to attend the function. But until he or she physically presents him- or herself at the function, and dressed appropriately for the occasion, he or she has not demonstrated the ability to stage. Dressing is an important aspect of staging (Goffman 1959), just as the right costumes would create the appropriate impressions Shakespeare wanted to create for the different characters in his plays, or for that matter, the impressions Baz Lurhmann wanted for his audience in his modern adaptation of *Romeo and Juliet*.

Finally, in *performing*, we focus on the ability of individuals to actually enact culturally appropriate behaviors in diverse cross-cultural interactions. Following the dramaturgical approach, culturally intelligent individuals will be able to perform the behaviors as required by the target culture in diverse situations. In performing, culturally intelligent individuals are able to express the appropriate emotions, display the appropriate body language, and communicate appropriately. They have the ability to create culturally appropriate emotional displays even though they may not feel the emotions. In a sense, culturally intelligent individuals are highly skilled in emotional displays. Moving to a new culture is in many ways an emotional experience for expatriates and sojourners, and adapting to a new culture does require emotional adjustments. Hence, we believe that culturally intelligent individuals are competent in performing "emotionally," that is, they are able to cope with the emotional expectations of social behaviors and interactions of the new culture. Like Stanislavski's "Method" of acting, they can evoke their emotions and experiences to achieve genuine performances in the new culture.

### *Training Methods for Behavioral Competencies*

Cognitive behavioral approaches focus on the ability and intention to change behavior to the benefit of the individual and others (Turk and Salovey 1996). Westmacott and Cameron (1981) describe a functional behavioral change approach. This work, which was developed at Southampton University, identified the now well-documented "ABC" of behavior change. When attempting to change an undesirable behavior, careful analysis of the behavior is necessary. This demands identification of the antecedents (A), the behavior (B) itself, and the consequences (C) of that behavior. After identifying the ABC of behavior change, one can introduce clear strategies on how to change behavior. Individuals who wish to develop their cultural intelligence will find it beneficial to identify those aspects of their behaviors that hinder them from increasing their cultural intelligence and to identify new behaviors that help them to increase their cultural intelligence.

Behavior modification is a well-established method, and was suggested by Stuart and Davis (1972). The underlying theory behind this particular approach is reinforcement theory. Behaviors that are sanctioned in a target culture are learned. Simulations and role-plays are conducted and mild punishment is given for inappropriate behavior. Behavior that is appropriate is reinforced. Consequently, the individuals who wish to increase their cultural intelligence learn to break out of old habits and to acquire a new repertoire of behaviors considered appropriate in the target culture.

Behavior change processes have been used effectively in many different settings with many different populations to change many different behaviors. An important question we need to ask in the context of cultural-intelligence training is: "What are effective means of training such persons to successfully apply behavior change processes?" Landis and Wasilewski (1999) in their comprehensive review of the state-of-the-art intercultural research, commented that evaluation of cross-cultural training effectiveness is crucial. Kealey and Protheroe (1996) have suggested that pre- and postknowledge measures of change in both cognitive and behavioral competencies are needed. In seeking effective training methods that are more amenable to objective and rigorous evaluation, we suggest new ways of training cultural intelligence.

In line with the dramaturgical approach to the training of behavioral competencies, we propose the use of role-plays, performing, and visual arts as methods of training. Although the use of role-plays is not new as a training method in cross-cultural training, we are thinking of innovative uses of performing and visual arts in developing participants' cultural intelligence. Specifically, we propose the use of narrative plays and theater-training methods for the purpose of training cultural intelligence. We propose something totally new because there has been no literature supporting the dramaturgical process as a training method in cross-cultural training. In our next book, which is devoted to the assessment and training of cultural intelligence, we will elaborate further on the specific training methods that can be used in training cultural intelligence.

Studies in psychotherapy and treatment of behavioral disorders have written about the benefits of the drama process (Carter 1974; Irwin 1977; Jackson 1997; Warger 1988). Through the medium of drama, individuals adopt an integrative, multisensory approach to the concept of learning. They are encouraged to utilize the physical, emotional, sensory, and cognitive processes to experience learning and improve self-knowledge and metacognition, an enhanced understanding of the feelings and motivation of others, and bolster self-efficacy. They are able to utilize the multisensory aspects of their experiences to acquire knowledge and constructively use behaviors to increase self-efficacy. Jackson asserts that dramatics or the use of drama can help participants "learn, in a constructive way, how the pageantry of rhythm, movement, expressiveness of voice, and originality of thinking can be used to solve rather than create problems" (1997, 163). In a study on the impact of improvisational dramatics program on student attitudes and achievements, Gourgey, Bosseau, and Delgado (1985) found a positive relationship.

As we propose that the ability to create favorable self-presentations, to frame, to script, to stage, and to perform is key behavioral competencies in cultural intelligence, we expect the experiential or hands-on learning approach using theater and dramatics will not only be illuminating but also exhilarating for individuals who aspire to develop their cultural intelligence.

## CONCLUSION

The framework of cultural intelligence proposed in this book has important implications for cross-cultural training. Trainers are now presented with a new approach toward cross-cultural training and expatriate preparation for overseas postings. Instead of merely focusing on the cognitive aspect of training (that is, providing would-be sojourners with the necessary declarative and procedural knowledge) cross-cultural training functions ought to now examine the metacognitive, motivational, and behavioral aspect of cross-cultural interactions. The cognitive, motivational, and behavioral aspects of CQ can be increased through the use of various techniques found in fields such as management, educational psychology, and the cognitive behavioral sciences. Although some of these methods and approaches have already been employed in current cross-cultural training programs, others have not. Of particular importance are the dramaturgical training approaches toward improving the behavioral aspect of CQ and use of goal setting and attitude change to increase motivation toward cross-cultural encounters. We urge both researchers and practitioners to incorporate these in designing future cross-cultural programs. To provide a more practical tool, we have also presented an overall competence-based framework for CQ training. However, we would like to highlight two qualifying factors.

First, the process of training for higher CQ, like any other forms of training, is likely to be culturally bound. In other words, one technique that works well for improving CQ in culture X may not work as well in culture Y. Earley and Erez (1997) argued that motivational approaches vary across cultures. Logically, motivational techniques that are at odds with the prevailing cultural values are not likely to be effective. For instance, we previously mentioned that goal setting is central to improving the motivational facets of CQ. However, while goal setting as an approach may work universally in improving motivation, different forms of implementation of this goal-setting approach might be in order in different cultures. In high power-distance cultures, it might be acceptable and appropriate for goals to be assigned by a superior, whereas in cultures with low power distance, greater personal involvement might be needed. The same apply for external motivation techniques that target the work environment. A team-based form of reward is more suitable for a collectivistic society than an individualistic society. Similarly, while approaches of enhancing the metacognitive aspect of CQ could have universal impact, the exact implementation ought to be cultural specific. Hence, it is very important for the reader to realize that while we discuss the various training techniques to improve CQ, one has to bear in mind that training itself is culturally bound and appropriate adaptation to the specific cultural setting may be necessary.

Second, we believe that CQ is determined by an interaction between environmental and innate factors. So far, we have been emphasizing how external interventions can be made to raise CQ level. However we recognize that at the end of the day innate factors such as personality do play a part. As such, training alone may not provide the best solution toward a more positive cross-cultural experience. A company sending an expatriate overseas may also want to look into selecting the person with the right personality and attitude so as to secure a better chance of success.

# 11

# SOME CONCLUDING THOUGHTS

During a recent interview on National Public Radio, the founder of the Asia Central Institute, Greg Mortenson, spoke about his life and contributions to international development. Masterson founded and organized a number of schools in rural Pakistan and Afghanistan specifically intended to educate young Muslim girls. He decided to pursue this course of action for a variety of easily lauded reasons, including a memorial to his sister who had died at an early age, his desire to repay a debt of gratitude for villagers who gave him care during an illness after an unsuccessful summit climb on K2, and an extension of the work he witnessed as a child during his father's ministerial work in Africa.

In describing his various experiences, one particular incident was striking with regard to cultural intelligence. One evening in the late 1990s while visiting a village in northern Pakistan, Mortenson was kidnapped by eight men wearing masks and whisked away into the night. He was held in captivity with no contact outside of his minimal contact with his abductors. After three days in captivity, he decided that he was very worried about his fate and that he needed to do something to improve his situation. He first asked his captors for a copy of the Koran along with someone who would translate it for him. Next, he told his captors that he was married and that his wife was expecting their first child, a son. He knew from his experiences in the local culture that a firstborn child was considered a positive omen and that having a son was a sign of particularly good fortune. Therefore, killing him would be very unlucky and create bad fortune for his executioners.

After eight days of captivity, Mortenson was released (he had been abducted as a pawn in a local political fight) unharmed. Interestingly, when he was invited back by his captors to visit the area several years later, he returned and gained some closure.

In discussing his captivity and his various ploys to remain alive, he found out that his captors did not really believe his story about the upcoming birth of a son but they commented that they did appreciate his knowledge of their local culture and customs. They believed that someone who had taken the time to understand their beliefs and practices showed a commitment to the region that had to be respected.

Were Mortenson's actions reflective of high cultural intelligence? It is not altogether clear that this is the case, but it seems likely. If Mortenson had developed a general, metacognitive strategy for creating goodwill between himself and the local community, this reflects cultural intelligence. If, however, he was using a few cultural norms that he had heard about without regard to their underlying meaning and he was not able to generalize his observations and experiences to other unfamiliar circumstances, then this does not reflect CQ. Did he exhibit the motivational and behavioral facets of CQ? Yes, it appears clear that Mortenson was highly motivated and able to exhibit behavior appropriate to the situation. However, given that he was motivated by extreme duress it may be inferred that his motivation was not entirely volitional. (His general activities in the region, for example, starting a number of schools to educate young girls from rural areas, suggest that his motivation to interact with the local populace was long-term and sustained.)

There are a number of important features of this simple (but critical) example of cultural adaptation. First, a single circumstance makes the inference of CQ very difficult unless a great deal is known about the situation. Second, all three facets of CQ are important for determining a person's overall CQ. Take as an example a quote from one of our expatriate managers we are studying:

> Well, I think when I first came to the UK, and to some extent, even now, there are times when I find, if you like, the British culture very formal. I'm actually married to an English gentleman. And when I first started interacting with his family, I was very struck by how extremely formal they all seemed to be with each other, in comparison to the way my family would be. A typical example is his aunt, who's in her 80s, lives about half an hour's drive away from us and I know that she is quite lonely. She's a widow and she lives with her son. We've actually grown quite close—and I know—they've actually told me themselves that they have very little social interaction, so it's actually quite nice for them when we go and visit them. They really appreciate our visits and I enjoy visiting them as well. But in order for us to visit them, we always have to telephone in advance and make an appointment a week or two weeks in advance. There's always this pantomime of, "Oh, I just must go and check my diary and the calendar," and I just think, "Why? I know there's nothing in it!" You know, I can—I would never show up unannounced—I would always phone and say, "Would it be convenient to come over and visit you?"

> But I don't expect to have to make a sort of formal appointment several weeks in advance, just to pop over for a coffee after dinner. You know, whereas in my family it would be, "Hi, I'm feeling bored. Are you doing anything? Shall I pop over now?" And it would be, "Yeah, okay." It would be a lot more casual and relaxed, whereas in Derek's family, all the sort of family interactions are terribly, terribly formal that way. And I think that's an English thing. You just wouldn't have that in an Asian family background.

In this example, this woman (Asian-English background) reflects somewhat limited CQ in several respects. Her cognitive and metacognitive skills are limited, and she does not provide insights concerning why this formality may exist in her extended family. Is this an inherent aspect of English families? Is it idiosyncratic to this particular relation? Is this formality related to her ethnicity or gender? How might this information be used for interactions with other English people and what might this suggest about traveling to other cultures? (In fairness to the interviewee, some of these metacognitive points are indeterminate based on this short interview.) We are provided with a brief glimpse into practice but with little insight concerning the principles and lessons underlying the observations. Further, it is not clear that she has adjusted her expectations and motivation to align with this character she has observed. The frustration she expresses about "checking one's diary to see if it is clear" suggests that her motivation is conflicting and that she is lacking in tolerance for an existing ritual of the family. Again, this frustration may be completely understandable and reasonable, but it reflects a more modest level of CQ motivation.

Although the cognitive and metacognitive skills are a central feature of CQ, they are certainly not the only features. Our emphasis in our framework is that CQ requires not only cognitive and metacognitive capabilities, but it requires motivational and behavioral elements as illustrated in the previous example. This is probably the most important contribution of our analysis of intelligence to the literature—intelligence is best conceptualized as more than a cognitive (or metacognitive) process and outcome. Given the literature in recent years by various authors including Berry, Gardner, Mayer, Salovey, and Sternberg, to name just a few, it seems to us that it is no longer useful to consider intelligence removed from the features of motivation and behavior in situ. This point is especially important from an organizational viewpoint since cognitive intelligence assessed through traditional means (for example, standardized tests) is not at all adequate to capture organizational skills, such as leadership, team membership, or creativity.

## NEW DIRECTIONS FOR CROSS-CULTURAL RESEARCH IN MANAGEMENT USING CQ

The construct of intelligence has proven problematic in the area of cross-cultural psychology for several reasons. First and foremost, the totalitarian perspective forwarded by "culture blind" scholars is far from acceptable in a pluralistic world. Concepts of intelligence measured (and often defined) by standardized instruments across widely ranging societies seem ludicrous at this juncture in globalization. How can someone expect spatial manipulation of blocks using a paper-and-pencil test to be construed as meaningful in such diverse circumstances as the Australian outback, African Sahara, or the urban areas of major U.S. cities? Despite Berry's call for a more culturally informed view of intelligence in the early 1970s (and others before him!), it appears that little progress has been made in psychology and even less progress in organization studies.

Based on our conceptual framework we would suggest an agenda for future research that is being pursued by our research team at Nanyang Business School as one possible model for scholars. Our team consists of three subteams each focusing on a component of CQ (cognition/metacognition, motivation, behavior). As a preliminary step, we are developing a self-diagnostic inventory used to assess the three components of CQ. This tool will provide a preliminary assessment of CQ and will form the basis of an intervention. However, it seems that a self-assessment such as this is only one possible way to assess CQ. We can imagine a work-samples approach to CQ using trained observers who watch an individual interact in new cultural settings. Nonparticipant observation seems to be another very fruitful way to assess CQ, and it captures the criterion of actual effectiveness and not merely self-perception. Imagine a staged cultural interaction to which an individual reacts as an alternative method for assessing CQ. Doing so with videotaped scenarios may provide sufficient richness to move beyond the limitations inherent in a typical cultural assimilator.

In our second phase, we will assess the psychometric nature of our instrument and compare it with existing measures of social and emotional intelligence as well as related individual differences characteristics. This will provide a sense of convergent and divergent validity for the measure. It seems to us that looking at CQ in relation to other psychological constructs including personality dimensions would be highly fruitful. Does a high CQ person tend to have a high score on Openness or Conscientiousness? How might CQ be related to other organizational behavior constructs, such as citizenship behavior or organizational-based self-esteem? Do people having high CQ regulate emotional display more effectively than others? These are just a few of the individual-level assessments that might be undertaken.

A third stage of this research program will be the application of CQ principles to various organizational content issues. Ultimately, this is the aim of our introduction of this construct to the literature. What role can CQ play in clarifying the complexity of cross-cultural interactions in a work or social context? In this regard, we think CQ might be utilized as either a moderator or mediating variable.

Take, for example, the interactions that we described in diverse international teams. Researchers focusing on multinational teams have suggested that constructing a sense of personal and collective identity drives many of the dynamics underlying these teams (Earley and Gibson 2002). What role might CQ play as this search for identity unfolds? Do individuals having high CQ incorporate others' features into their own personal identity? Are teams composed of high CQ members quicker to form a common identity?

CQ has a number of other applications such as leadership and motivation in a cultural context. For example, there is growing interest in how leadership manifests itself in various cultures. Some cultures appear to endorse strong and paternalistic leadership, while others prefer a more benign and participative leader. Do these leaders vary in their CQ? More importantly, are the various components of CQ operating comparably for these various types of leaders? One might conjecture that a strong and directive leader is highly focused on cognition and motivation, while a participative leader has highly developed skills for motivation and behavior.

Although we have framed CQ as most applicable to international sojourners, it seems logical that these principles would provide benefit to those scholars conducting research on organizational change and culture. As an example, take the extant literature on organizational culture and mergers. Managing the process of organizational change requires great adaptation by employees (Goffee and Jones 1996). Initiating widespread organizational change during a merger or acquisition requires change agents who are able to adapt to the various demands of differing constituencies in the organizations. High CQ employees are likely to be more effective change agents than low CQ employees in a change program. Why? They are able to determine the core commonalities among various interest groups within the organization(s) and weave them together into a hybrid culture (Earley and Mosakowski 2000). Organizational researchers often attribute success or failure of a change program to key leaders implementing a change. Our framework suggests that it is not merely an issue of leadership—it is leadership that is culturally astute. A change agent needs to create a grassroots integration of subgroups within an organization by drawing on their common goals and interests as well as providing for an enhanced sense of role identity with the emerging new organization.

There are numerous human resources applications of CQ that merit research attention as well. An area receiving a great deal of attention concerns a person's reactions to a performance appraisal. Providing effective appraisals of one's employees is a challenge within a given culture and is a Herculean chore when dealing with employees from another culture. How might an expatriate manager be more effective in providing appraisals to his or her employees? If we follow recent work by Sanchez-Burks (personal conversation) concerning imitation and mimicry, he suggests that individuals who are effective mimics will put their interviewees at ease. A person with high CQ has good mimicry skills and should be able to provide a performance appraisal effectively by leveraging the positive influence of mimicry. Of course, an immediate and obvious application of our framework for HRM is in the area of selection for expatriate work assignments as well as cross-cultural training. What has been lacking in the cross-cultural training literature is an underlying construct to understand the differential effectiveness of staged interventions such as cultural assimilators. This inefficacy of cross-cultural training may be explained and explored using cultural intelligence. For example, training methods may lack an emphasis on metacognitive processing in favor of concrete details, or "facts sheets." However, even more generalized, or metacognitive, interventions may be wont since they do not necessarily address the motivational and behavioral aspects of CQ. It is only through a three-pronged intervention that successful expatriate training will take place.

There are many paths that scholars may take using CQ that are largely unexplored at this point. We hope that these few suggestions act as a stimulus for future investigations by researchers in cross-cultural management.

## NEW DIRECTIONS FOR CROSS-CULTURAL TRAINING IN MANAGEMENT

In the organization studies field why should we concern ourselves with such arcane constructs as intelligence? Simply put, globalization and intercultural interaction require that a more informed view of adaptation and understanding be established. There have been numerous studies examining intercultural interaction and expatriate work assignments. Nevertheless, this field is still lacking an integrative framework to understand sojourners' adjustment and adaptation. Our framework not only is a beginning for understanding why adaptation and adjustment occur, but also it provides researchers with ways of addressing interventions according to the weaknesses a person may have with individual facets of CQ. This approach provides for a more tailored intervention for international training in organizations.

Traditional research on the expatriate process (training, placement, and repatriation) has been largely absent of a theoretical framework for understanding it and what theory exists tends to be piecemeal and ad hoc. (The work we discuss by Black, Mendenhall, Oddou, and Schuler are nice counterexamples of research that tries to integrate expatriate work.) Much of this work is based on cultural values as a starting point, as evidenced in Trompenaars's popular book, *Riding the Waves of Culture*. We do not mean to sound overly critical of these values-based approaches since they dominate the research scene in organizational studies at this point. However, it seems to us that a values-based approach has limitations that have been experienced by researchers at this point, and new approaches will yield more promise. This is the essence of the work conducted by Markus and Kitayama, who explore the self-concept as an alternative to strict cultural values, as well as very promising work by Erez and Earley, Morris, Nisbett, and others, who are using a more cognitive approach to understanding culture.

Effective training for cross-cultural interaction must be targeted at all three areas that underly CQ: cognition/metacognition, motivation, and behavior. There are a number of approaches that researchers and practitioners have undertaken to train sojourners. The vast majority of these approaches appear to focus on the cognitive training of individuals often looking at knowledge transfer as a key point. Many companies focus on training that provides an expatriate (and, on occasion, the expat's family) with factual knowledge of a specific location, looking at such issues as politics, economics, and local practices (Black, Gregerson, and Mendenhall 1992a). These programs range from grossly simplistic overviews of general country characteristics to more involved experiential learning approaches (Earley 1987). However, they lack a systematic underlying conceptual framework of the individual that might be used to guide specific interventions tailored for each sojourner. Although training metacognitive skills through an intervention such as a universal cultural assimilator appears useful, this is only true for individuals having a deficit in this area of CQ. It may well be that a particular candidate is highly skilled in the metacognitive and cognitive skills but is lacking in motivation or behavioral skills.

The first step of an effective expatriate training intervention in a company is the use of a diagnostic tool to assess the capabilities of various candidates. The paper-and-pencil instrument we described in the previous section is one starting point. However, we recommend other assessments as well, such as behavioral sampling through staged scenarios (perhaps presented in videotaped form), short-term in-country visits, and so forth.

Once assessed, the three components of CQ provide a basis for a multiprong intervention for cross-cultural training. Typical interventions include a briefing concerning cultural values in the target country as well as a general discussion of these values. Such a discussion might be useful for helping an individual develop metacognitive categories for understanding general parameters of new cultures. However, values discussion is only one part of developing a broader metacognitive view. A metacognitive intervention must focus on information-gathering and analysis skills such as inductive reasoning and analogical logic. Cognitive training might include specific information concerning practices and rituals in a given culture as well as specific strategies to learn. Motivational aspects of CQ need to be addressed as well. The most likely focus of motivational training will center on efficacy and goal setting. It is not a question of whether a sojourner will make a mistake—it is merely a question of when it will happen and how he or she will respond when confronted with failure feedback. If efficacy is low, an expatriate may not handle the inevitable setbacks well.

It is through the motivation component that values orientation is best understood. Our assertion is that cultural values training is best thought of as a device that helps align role identities of the sojourner with local personnel. Understanding others' cultural orientation is useful from a cognitive perspective insofar as it provides a person with a convenient classification scheme. However, it is more than just classifying local personnel into categories such as "group oriented" or "hierarchical" that is a key to values training. This intervention provides an expatriate with a basis for integrating personal identity with local role identities—both cultural and organizational.

Finally, behavioral training needs to move beyond mere language training or the proper way to shake hands. An effective intervention should include drama-based training (for example, acting lessons) as well as mimicry techniques. Controlling ones verbal and nonverbal behavior is very important for successful adaptation to a new culture. There is a precedent for this type of training in corporations, namely, presentations to the media. This type of behavioral training should prove to be highly effective in enhancing a person's CQ and cultural adjustment. Probably more than any other component of CQ, the behavioral facet is best trained through experiential and role-based interventions. For example, a trainee might be placed in a number of mock cultural encounters to see how well he or she can regulate his or her behavior according to the immediate situation. This methodology might be used to assess behavioral CQ as well in a version of a work samples test.

Mock cultural encounters are useful diagnostic tools as well for assessing more than just behavior. These might prove useful for expanding a person's metacognitive skills as well as behavioral repertoire. A multipronged training intervention using staged cultural encounters will enhance both cognitive and behavioral skills.

By using this type of intervention and debriefing a trainee about strategies to learn more about a new culture, a trainee's metacognitive skills are enhanced. Specific knowledge about a given culture is acquired as well as a side benefit, although our argument is that this is clearly a secondary benefit. Additionally, these types of encounters are likely to enhance a person's self-efficacy and motivation. Active training methods such as site visits have long been advocated by training personnel, but it has not been clear how and why such interventions might be useful. Using the CQ framework, it becomes clear how to enhance training effectiveness using cultural encounters.

## FINAL THOUGHTS

What our framework has not done is redefine intelligence per se. We have chosen to define and elaborate on one specific realm of interpersonal behavior: intercultural adaptation. Our approach provides an expansion on the limitations inherent to existing work on social and emotional intelligence, but it does not presume to suggest that all aspects of intelligence are captured by CQ. To the contrary, our purpose has been to limit our approach to understanding how people adapt to new cultural circumstances. Our special focus has been on intercultural understanding in a work context. To this end, we proposed and discussed a conceptual framework that integrates cognition, motivation, and behavior in the workplace. Another important aspect of our work is the drawing together of cognition and motivation, two areas within psychology that are most often considered as separate and independent despite the pioneering efforts of psychologists, such as Bandura and Locke, and cross-cultural psychologists, such as Berry and Triandis.

The organizational studies field has come to a critical phase in its adoption and adaptation of research findings from psychology and companion fields. A strong temptation to adopt ideas from psychology (and other fields) without providing our own value-added continues. We believe that this approach is not meritorious; we need to develop our own conceptual frameworks appropriate for our field. It would be all the better if our companion fields (for example, psychology, anthropology, and sociology) adopted and adapted our theoretical frameworks. Cultural intelligence provides a new perspective that is lacking in psychology and organizational studies; it focuses on intercultural understanding through an integrative approach not available elsewhere in the literature.

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